

MOODY AFB



Final Environmental Assessment

**Conversion of the 820th Security Forces Group
at Moody AFB, Georgia
to a Contingency Response Group**

August 2003

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ACRONYMS & ABBREVIATIONS

µg/m ³	micrograms per cubic meter	HW	highway
AAM	annual arithmetic mean	HWMP	Hazardous Waste Management Plan
ACC	Air Combat Command	I	Interstate
AEIR	Air Emissions Inventory Report	ICRMP	Integrated Cultural Resources Management Plan
AFB	Air Force Base	INRMP	Integrated Natural Resource Management Plan
AFI	Air Force Instruction	LEQ	equivalent sound level
AFR	Air Force Range	LTO	landing and takeoff
AGL	above ground level	MOUT	Military Operations in Urban Terrain
Air Force	United States Air Force	MSL	mean sea level
Airborne RED HORSE	Airborne Rapid Engineer Deployable Heavy Operations Repair Squadron Engineer	NAAQS	National Ambient Air Quality Standards
AQCR	Air Quality Control Region	NEPA	National Environmental Policy Act
ATC	air traffic control	NO ₂	Nitrogen Dioxide
CAA	Clean Air Act	NRHP	National Register of Historic Places
Camp Blanding	Camp Blanding Training Site	O ₃	Ozone
CEQ	Council on Environmental Quality	Pb	Lead
CFR	Code of Federal Regulations	PM ₁₀	particulate matter < 10 microns
CO	Carbon Monoxide	ppm	parts per million
CRG	Contingency Response Group	PSD	Prevention of Significant Deterioration
CRMP	Cultural Resources Management Plan	RCRA	Resource Conservation and Recovery Act
dB	decibel	ROI	region of influence
dba	A-weighted decibel	RQW	Rescue Wing
DNL	day-night average sound level	SEARCH	Southeastern Archaeological Research, Inc.
DoD	Department of Defense	SEL	sound exposure level
DZ	drop zone	SF	square feet
EA	Environmental Assessment	SFG	Security Forces Group
EIS	Environmental Impact Statement	SO ₂	Sulfur Dioxide
EO	Executive Order	SOP	standard operating procedures
EPA	United States Environmental Protection Agency	STG	Special Tactics Group
FAA	Federal Aviation Administration	TGO	touch and go
FArNG	Florida Army National Guard	tpy	tons per year
FLAAQS	Florida Ambient Air Quality Standards	USCB	U.S. Census Bureau
HMMWV	high mobility multipurpose wheeled vehicle		

FINAL FINDING OF NO SIGNIFICANT IMPACT

NAME OF PROPOSED ACTION. Conversion of the 820th Security Forces Group (820 SFG) to a Contingency Response Group (CRG) at Moody Air Force Base (AFB), GA.

DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES. The United States Air Force, Headquarters Air Combat Command proposes to convert the 820 SFG to a CRG. The conversion would involve an increase in personnel and equipment, renovation to facilities, and change training requirements. The CRG would be comprised of approximately 915 personnel from the SFG, 720 Special Tactics Group (STG) and Airborne Rapid Engineer Deployable Heavy Operations Repair Squadron Engineer (RED HORSE) units. Thirty-three additional personnel would be added to Moody AFB to support the change in training. One mobile airfield repair equipment set (one Crawler Carrier, one Combat Support Trailer, one Backhoe and two Multi-terrain Loaders), 300 personnel parachutes and 100 equipment parachutes would be added to the CRG. Buildings 721 and 758 on Moody AFB would be renovated to provide storage and equipment maintenance needs. Personnel at Moody AFB would participate in monthly parachute proficiency and equipment drops at existing drop zones on the base or Camp Blanding. Parachute proficiency training for members of the Airborne RED HORSE and the STG would occur at their current locations. In addition forty-three personnel from these groups would be temporarily assigned for quarterly training at Camp Blanding and/or Avon Park Air Force Range (AFR). Quarterly training would involve airborne jumps, equipment drops and on-ground field exercises (establishing force protection, emergency medical response, air traffic control and rapid runway repair). No live ammunition is proposed for use during ground training, only blanks. Once per year ground burst simulators and smoke grenades would be used to simulate a deployment scenario.

The Air Force evaluated three alternatives: A, B and C (No-Action). Alternatives A and B each evaluated monthly parachute proficiency and equipment drop training. Under Alternative A all quarterly training would be conducted at Camp Blanding and under Alternative B all quarterly training would be conducted at Avon Park AFR. Under Alternative C, the conversion of the SFG would not occur and current training activities would remain unchanged.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES. This Environmental Assessment (EA) provides an analysis of the potential environmental consequences associated with the alternatives. For quarterly and annual training the location used would depend on availability. Therefore, for the purposes of this analysis, it is presumed that the environmental impacts would be the same as or less than those identified in Alternatives A and B. Resource areas evaluated in detail include: Airspace Management, Safety, Noise, Hazardous Materials and Waste, Earth Resources, Water Resources, Air Quality, Biological Resources, Cultural Resources, Land Use and Transportation, Visual and Recreational Resources, Socioeconomics and Environmental Justice. Impacts to Earth, Water, Land Use, Transportation, Visual and Recreation were found to be insignificant based on minimal additional training that would occur only in currently disturbed areas used for similar training.

AIRSPACE MANAGEMENT. Under the alternatives there would be a one percent increase in sorties at Moody AFB, two and one half percent or less at Camp Blanding and one percent at Avon Park AFR. With the exception of increased usage, no changes to airspace would occur under the proposed action or alternatives. When coupled with existing airspace scheduling procedures, activity level of other users of the airspace would remain consistent. No significant impacts would occur under the alternatives.

SAFETY. There would be an increased safety risk to personnel associated with parachute proficiency and equipment drop training under the alternatives. Standard operating procedures and airfield/airspace closure during parachute proficiency and equipment drop training have been established to minimize safety risks. No significant impacts are anticipated.

NOISE. Aircraft operations dominate the noise environment at Moody AFB. An increase of less than one percent at Moody AFB would not contribute significantly to the noise environment. Camp Blanding and Avon Park AFR noise environments would continue to be dominated by weapons use. Less than one percent increase in personnel training at Camp Blanding and Avon Park AFR would not impact the existing noise environment.

HAZARDOUS MATERIALS AND WASTE. Renovations of buildings 721 and 758 would cause a temporary increase in use and storage of a variety of hazardous materials and waste including paint products. These increases would be temporary and waste would be handled in accordance with the Moody AFB Hazardous Waste Management Plan. In addition, increasing the use of ground burst simulators, smoke grenades, and blank ammunition by less than one percent at Camp Blanding or Avon Park AFR would only minimally impact waste generation and disposal during range cleanup. No significant impacts would occur under any of the alternatives.

AIR QUALITY. Impacts to air quality due to the building renovations on Moody AFB are expected to be temporary and negligible. Increasing aircraft sorties at Moody AFB by less than two percent, Camp Blanding by less than three percent and Avon Park AFR by less than one percent would result in increased air emissions. The increase under the alternatives would be minimal and would not exceed *de minimus* levels. This increase would not significantly affect air quality in any region; therefore a conformity determination is not required.

BIOLOGICAL RESOURCES. No additional impacts to vegetation are anticipated at any of the proposed training sites. No significant impacts to wildlife, threatened or endangered species or their habitats are expected from implementing the proposed action or alternatives. Minor impacts could occur to wetlands within the Moody AFB drop zone from off target equipment drops; however, no long-term damage would be expected.

CULTURAL RESOURCES. No impacts to architectural resources would occur as a result of renovations to buildings 721 and 758. There is a potential for uncovering archaeological resources during building renovations. Any discoveries would be handled in accordance with existing management plans and no significant impacts would occur.

SOCIOECONOMICS/ENVIRONMENTAL JUSTICE. Under Alternatives A and B there will be an additional 33 personnel added to Moody AFB, this minimal increase is not expected to have significant impacts to socioeconomics in the Moody AFB region. This action would not result in a disproportionate adverse effect on minority persons or low-income populations.

CONCLUSION. Based on the findings of the EA conducted in accordance with the requirements of the National Environmental Policy Act, the Council on Environmental Quality regulations, and Air Force Regulation 32-7061 codified in 32 Code of Federal Regulation Part 989, and after careful review of the potential impacts, I conclude that implementation of any of the alternatives would not have significant impact to the quality of the human or the natural environment. Therefore, a Finding of No Significant Impact is warranted, and an Environmental Impact Statement is not required for this action.



Thomas P. Brown, Lt Col, USAF
Deputy Chief, Environmental Division

30 Jun 03

Date

EXECUTIVE SUMMARY

This Environmental Assessment (EA) describes the potential environmental consequences resulting from the proposed conversion of the 820th Security Forces Group (SFG) to the 820th Contingency Response Group (CRG) at Moody Air Force Base (AFB), Georgia.

This environmental analysis process is designed to:

- Ensure the public is involved in the process and fully informed about the potential environmental effects.
- Help decision makers take environmental factors into consideration when making their decision.

Environmental Impact Analysis Process

This EA has been prepared by the United States Air Force (Air Force), Headquarters Air Combat Command (ACC), and the 347th Rescue Wing (RQW), in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969, the Council on Environmental Quality regulations implementing NEPA, and 32 Code of Federal Regulations Part 989, *The Environmental Impact Analysis Process*.

Purpose and Need for the Proposed Action

The purpose of the proposed action is to enhance the effectiveness and efficiency of the 820 SFG at Moody AFB and transition the group to a CRG. The CRG would provide the Air Force with an integrated and trained force designed to rapidly deploy and establish initial airfield operations for any contingency operation.

ACC requires a single cohesive unit to support forward basing operations. This requirement would be met through the combined training of personnel from security forces, Airborne Rapid Engineer Deployable Heavy Operations Repair Squadron Engineer (Airborne RED HORSE), and Special Tactics Group (STG). The training would provide the efficiency the Air Force requires to rapidly deploy an integrated force capable of establishing initial airfield operations within any contingency operation to support aerospace expeditionary forces.

Proposed Action and Alternatives

The proposed action would involve an increase in personnel, an increase in equipment, renovation to facilities, and a change in training requirements. Converting the 820 SFG (currently 685 personnel) would require the addition of 33 support personnel to Moody AFB. Eight personnel from the 720 STG and 189 personnel from Airborne RED HORSE would train as part of the CRG during three quarterly and

one annual exercise. The personnel from STG and Airborne RED HORSE would remain at their permanent installations.

Increases to the equipment inventory at Moody AFB would include one Mobile Airfield Repair Equipment Set (which consists of: one IC 45 Crawler Carrier, one Combat Support Trailer, one 420D IT Backhoe Loader, two 277 Multi-terrain Loaders), 300 personnel parachutes, and 100 equipment parachutes. Interior renovation of Buildings 721 and 758 and the addition of a loading ramp and dock to building 758 would be required to accommodate storage and maintenance functions for the new equipment.

In addition to current training, personnel assigned to the CRG would require monthly parachute proficiency training at their permanently assigned base. Equipment drops would occur monthly at either Moody AFB or Camp Blanding Training Site, FL (Camp Blanding). On a quarterly basis, up to 243 personnel from Moody AFB, the 720 STG and Airborne RED HORSE will train together at Camp Blanding or Avon Park Air Force Range (AFR), FL. The quarterly training exercises would include an equipment drop and on-ground field exercises. Once per year, this field training would involve the use of pyrotechnics. The proposed locations for the quarterly and annual trainings are Camp Blanding or Avon Park AFR.

Aircraft support for the CRG would be scheduled in advance with Air Mobility Command. The 347 RQW may provide limited support. Training days would be scheduled based on aircraft availability from other units. C-130 and C-17 aircraft are proposed to be used during the trainings.

This EA documents the analysis of three alternatives for implementing the proposed action. Under each alternative, the proposed building renovations would occur on Moody AFB, the parachute proficiency and equipment drop training for CRG personnel would be conducted at Easy and/or Airshow Drop Zones (DZ) at Moody AFB, or Weinburg DZ at Camp Blanding. The alternatives address the different proposed locations to conduct the quarterly and annual training exercises. Under Alternative A, these trainings would be conducted at Weinburg DZ at Camp Blanding. Under Alternative B, quarterly and annual training would take place at Hard Luck DZ at Avon Park AFR. Under Alternative C, the No Action Alternative, the proposed conversion of the 820 SFG would not occur.

Summary of Environmental Consequences

It is expected that there would be minor impacts associated with implementation of any of the alternatives. A summary of the potential impacts is contained in Table ES-1.

Table ES-1 Summary of Potential Environmental Consequences			
<i>Resource Area</i>	<i>Alternative A</i>	<i>Alternative B</i>	<i>Alternative C No-Action</i>
Airspace Management	0	0	0
Safety	0	0	0
Noise	0	0	0
Hazardous Materials and Waste	0	0	0
Earth Resources	0	0	0
Water Resources	0	0	0
Air Quality	0	0	0
Biological Resources	0	0	0
Cultural Resources	0	0	0
Land Use and Transportation	0	0	0
Visual and Recreational Resources	0	0	0
Socioeconomics	0	0	0
Environmental Justice	0	0	0
Notes: + Potential Positive Impacts — Potential Significant Impacts 0 No Significant Impacts			

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1.0 PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 INTRODUCTION

The United States Air Force (Air Force), Headquarters Air Combat Command (ACC) proposes to convert the 820th Security Forces Group (SFG) at Moody Air Force Base (AFB), Georgia, to a Contingency Response Group (CRG).

This environmental assessment (EA) has been prepared to analyze the potential environmental consequences associated with the proposed action and alternatives in accordance with the requirements of the National Environmental Policy Act (NEPA); the Council on Environmental Quality (CEQ) regulations and 32 Code of Federal Regulations (CFR) 989, *Environmental Impact Analysis Process*.

1.2 BACKGROUND

Proposed Contingency Response Group

The proposed CRG would include personnel from the 820 SFG from Moody AFB; Airborne Rapid Engineer Deployable Heavy Operations Repair Squadron Engineer (Airborne RED HORSE) units from Malmstrom, Montana; Nellis, Nevada; Mountain Home, Idaho; and Langley AFBs, Virginia; and Hurlburt Field, Florida; and the 720th Special Tactics Group (STG) from Hurlburt Field.

820th Security Forces Group

The SFG mission provides the Air Force with fully dedicated, highly capable and responsive force protection for expeditionary air forces. The 820 SFG unit provides three cohesive, integrated, “first-in” squadron level force protection teams consisting of a total of 685 personnel. The unit is composed of personnel from the security forces, special investigations, civil engineering, logistics and supply, communications, intelligence, administration, transportation, explosive ordnance disposal, and medical career fields. The SFG provides the capability to assess threats at deployed locations and respond with appropriate force protection. The 820 SFG is located at Moody AFB.

Airborne RED HORSE

The Airborne RED HORSE allows the Air Force to air-drop, air-insert or air-deliver the capability to assess and rapidly repair airfields for combat use. The purpose of Airborne RED HORSE is to rapidly deploy into an austere location to assess airfield capabilities, prepare helicopter or aircraft landing areas, clear obstacles, make expedient airfield damage repairs, and provide initial assessment of required follow-on force and materiel resources to establish airfield contingency operations. Airborne RED HORSE is

also able to assess potential hazards, clear small areas of unexploded ordnance and explosive hazards, and provide limited fire protection/rescue and medical services. Airborne RED HORSE units to train with the CRG would come from Malmstrom, Nellis, Mountain Home, and Langley AFBs, and Hurlburt Field.

720th Special Tactics Group

The 720 STG is an integral part of the Air Force Special Operations Command that is based at Hurlburt Field, FL. The group provides direct command and control for Air Force Special Tactics units. These forces are comprised of combat controllers and pararescue personnel who form fast-action deployable units in support of joint or combined special operations task forces. These teams conduct airfield or assault zone assessment, provide emergency trauma medical support and combat search and rescue, position navigational aids and target designation equipment, and control fire systems.

Proposed Training Locations

The proposed training locations for the CRG are Moody AFB, Avon Park Air Force Range (AFR) and Camp Blanding Training Site (Camp Blanding) (Figure 1.2-1).

Moody Air Force Base

Moody AFB is located in south-central Georgia about 10 miles northeast of the city of Valdosta in Lowndes and Lanier counties (Figure 1.2-2). The base is on approximately 11,000 acres of Federally-owned land. The installation consists of the main base (5,039 acres), Grand Bay Range (5,874 acres), and Grassy Pond Recreational Annex (489 acres). There are 5,068 military and civilian personnel assigned to Moody AFB.

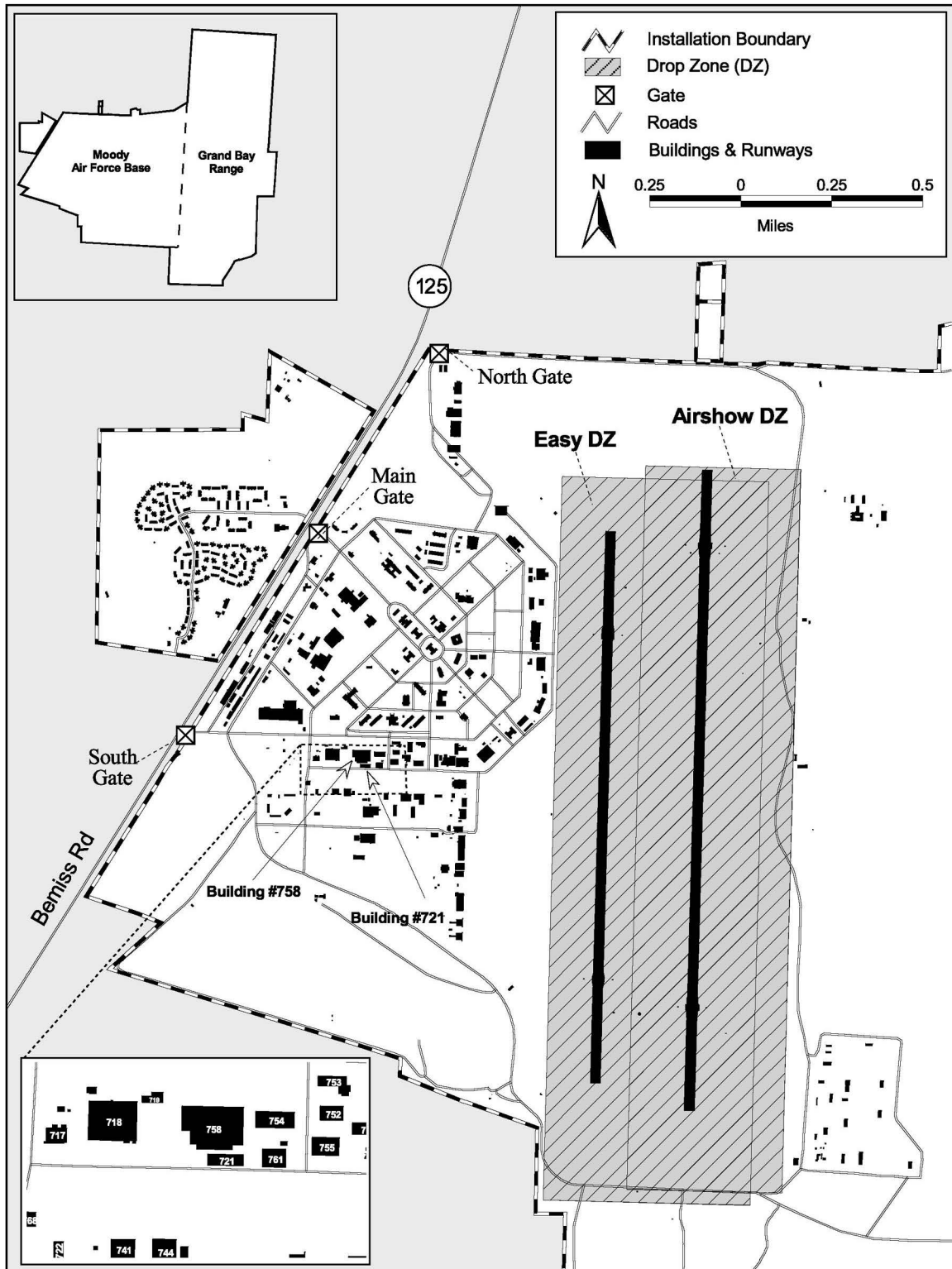
Moody AFB is home to the 347th Rescue Wing (RQW) whose primary mission is to organize, train and employ a combat-ready HC-130 and HH-60 search and rescue team. Moody AFB hosts Air Education and Training Command 479th Flying Training Group which is responsible for Joint Primary Aircraft Training in the T-6A aircraft and Introduction to Fighter Fundamentals in the T-38C aircraft. Headquarters 820 SFG with two security forces squadrons were originally beddown at Moody AFB with the support of an EA with a Finding of No Significant Impact signed in February 2000. In December 2001, a Categorical Exclusion was signed supporting the modification of this beddown, creating a third security forces squadron. Their mission is to provide force protection for initial U.S. “first in” forces to any operating location in support of the Air Force Global Engagement Mission.

The CRG proposes to use the Easy and Airshow Drop Zone (DZ) at Moody AFB for training. The DZs are located on the airfield around Runway 18L/36R in an area of maintained grass (Figure 1.2-2). No large trees or other major obstacles exist within either DZ. Moody AFB is currently preparing an EA to install a flightline security fence around the entire airfield.

Figure 1.2-1 Project Area



Figure 1.2-2 Moody AFB



Camp Blanding

Camp Blanding is a Florida Army National Guard (FARNG) Base located in Clay County, FL (Figure 1.2-3) and has approximately 73,000 acres of training area. The installation is subdivided into 32 training areas and offers specialized weapons training facilities, as well as a Military Operations in Urban Terrain (MOUT) training. Camp Blanding leases 13,000 acres of land on the west side of the installation to Dupont Mining Corporation. Camp Blanding is home to Army and Air National Guard units including the 202nd RED HORSE tenant unit. The mission of Camp Blanding is to provide the state of Florida with the personnel and equipment to conduct operations in support of Federal or state declared emergencies. There are recreational areas at Camp Blanding used for hunting, fishing, camping, boating, and team sports (i.e., softball, racquetball, baseball, tennis, volleyball).

Camp Blanding has 50 live fire ranges; five automated ranges for small arms and handgun qualifications; a crew combat range; and four platoon/squad movement to contact ranges. Training areas include three Major Maneuver Areas with a total of 55,000-plus acres of varied topography with minimal environmental restrictions. The MOUT Collective Training Facility consists of 16 buildings and tunnel trainers. In addition, there are five approved DZs on Camp Blanding.

The CRG proposes to use the Weinburg DZ for training. The area within the cantonment area where the 202nd RED HORSE currently trains could also be used for rapid runway repair training. An approved C-130 landing strip would be used for cargo lifts. The Weinburg DZ is located in the southern portion of the base. The DZ boundary is surrounded on all sides by 30 feet tall trees. The land beneath the DZ is a maintained grass area with no major obstacles.

Avon Park Air Force Range

Avon Park AFR is a 106,000 acre bombing and gunnery range controlled by the 347 RQW. Avon Park AFR is located approximately 10 miles east of the City of Avon Park in Polk and Highlands Counties, FL (Figure 1.2-4). The primary mission of Avon Park AFR is to provide a training infrastructure that allows air-to-ground forces to practice the latest combat training techniques and procedures safely, efficiently, and realistically.

The 347 RQW at Moody AFB is responsible for the operation and maintenance of Avon Park AFR. Detachment 1, Operating Location Alpha of the 347 RQW operates and maintains mission support functions and facilities for the bombing, gunnery, and combat training ranges.

Figure 1.2-3 Camp Blanding

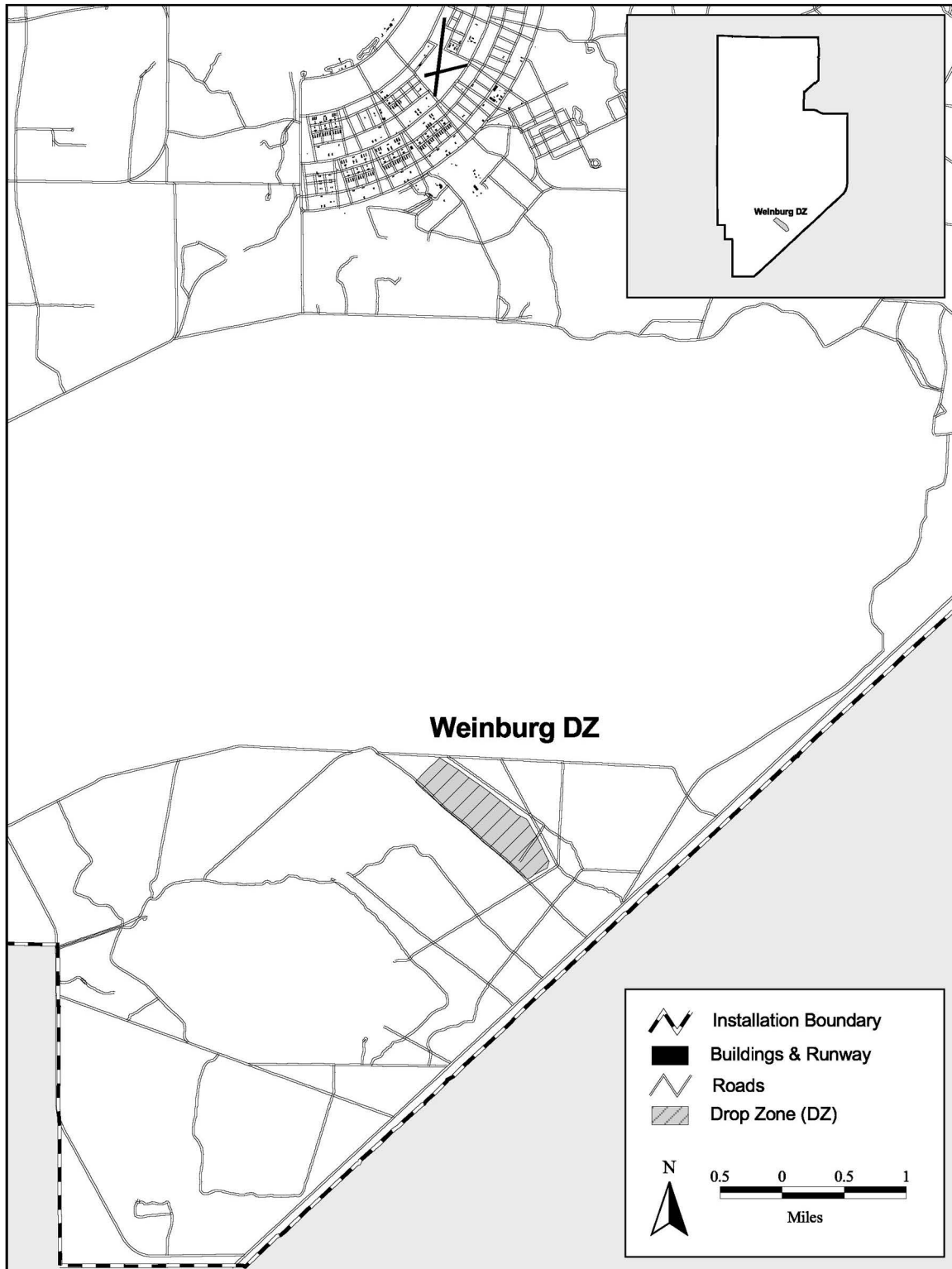
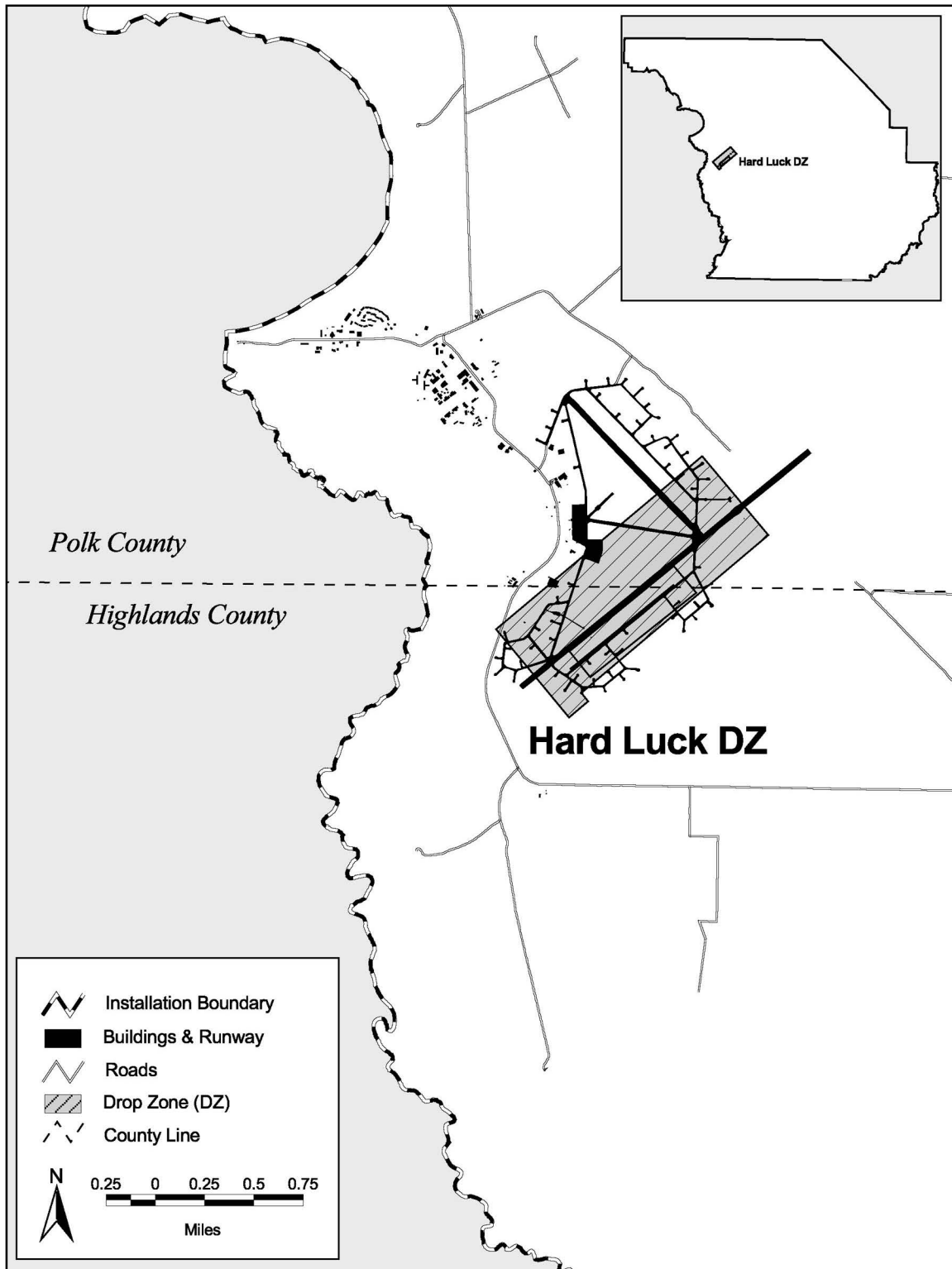


Figure 1.2-4 Avon Park AFR



The range airspace is used for air-to-air combat training and air-to-ground bombing and gunnery training by Department of Defense (DoD) air crews, as well as other DoD military units for a variety of training activities, including artillery firing, search and rescue operations, joint services exercises, and other ground training exercises. Avon Park AFR has three scorable, tactical, air-to-ground ordnance ranges; three scorable, conventional, air-to-ground ordnance ranges; and an airfield with two runways, and a dirt assault strip. In addition, the AFR has personnel and equipment paradrop areas, land navigation areas, three ground training areas, a small arms range, and 11 DZs.

The proposed training for the CRG would occur on the Hard Luck DZ. The DZ is located in the center of the range on the west side. The DZ contains an airfield and a dirt assault strip. Within the DZ there exist taxiways, parking areas, runway markers, and some trees. Power lines, fences and tall trees exist in the perimeter of the DZ.

1.3 PURPOSE AND NEED FOR THE ACTION

Under the proposed action, the 820 SFG would transition into a CRG in order to rapidly deploy as an integrated force capable of establishing initial airfield operations in any contingency operation to support aerospace expeditionary forces. No unit in ACC currently provides all of these capabilities. The CRG would provide ACC an integrated and trained force structure designed to facilitate transition to a large-scale deployment and could be tailored to enable the full spectrum of contingency operations.

The conversion is required as a result of the significant changes in both focus and magnitude of the threat to Air Force personnel worldwide. The unit must be prepared to assess, provide force protection, operate staging bases and operating locations in support of any aerospace expeditionary force deployment. The CRG must be capable of being on the ground first to provide initial steps to meet this objective. Combining the 820 SFG, Airborne RED HORSE and 720 STG training would increase the efficiency of rapid deployments and provide ACC a cohesive unit capable of these operations.

1.4 REGULATORY COMPLIANCE

A variety of laws, regulations, and executive orders (EOs) apply to Federal actions and form the basis of the analysis presented in this EA. NEPA requires Federal agencies to consider potential environmental consequences of proposed actions and enhance the environment through well-informed Federal decisions. CEQ was established under NEPA to implement and oversee Federal policy in this process. Other related Federal regulations include 32 CFR 989; *Environmental Impact Analysis Process*; EO 11514, *Protection and Enhancement of Environmental Quality*; and the Endangered Species Act. Other relevant laws and regulations are contained in Appendix A.

1.5 ORGANIZATION OF THE EA

This EA assesses the potential impacts of the proposed action and alternatives, including the No Action Alternative, on potentially affected environmental resources. Chapter 1.0 provides background information relevant to the proposed action and discusses its purpose and need. Chapter 2.0 describes the proposed action and alternatives. Chapter 3.0 describes baseline conditions (i.e., the conditions against which the potential impacts of the proposed action and alternatives are measured) for each of the resource areas, while Chapter 4.0 describes potential environmental impacts of the proposed action and alternatives on these resources. Chapter 5.0 includes an analysis of potential cumulative impacts and any irreversible and irretrievable commitments of resources. Chapter 6.0 contains references used for the preparation of this EA. Chapter 7.0 lists persons and agencies contacted and Chapter 8.0 lists the preparers. Appendix A contains a list of relevant laws.

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2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

The Air Force proposes to convert the 820 SFG at Moody AFB to a CRG creating an interdisciplinary force capable of rapid deployment worldwide. The conversion would involve an increase in personnel, an increase in equipment, renovation to facilities, construction of a loading dock and ramps, and a change in training requirements.

The conversion is required as a result of the significant changes in both focus and magnitude of threat to Air Force personnel worldwide. The unit would be prepared to assess, provide force protection, operate staging bases and operating locations in support of any aerospace expeditionary force deployment. The CRG would be capable of being on the ground first to provide initial steps to meet this objective. The CRG would combine three Air Force units which would deploy together during an emergency to assess threats in an area. The CRG would be capable of assessing, preparing, and establishing airfield operations worldwide by conducting airborne, air-mobile, air-land, and over land insertion operations.

2.1.1 Personnel

The CRG would be comprised of approximately 915 personnel from the 820 SFG, the 720 STG, and Airborne RED HORSE (Table 2.1-1). All personnel currently assigned to 820 SFG at Moody AFB would become CRG personnel. To support the change in training, 33 CRG support personnel would be added to Moody AFB. Only one squadron and the headquarters unit (approximately 200 personnel) would participate in each of the quarterly trainings. Approximately eight personnel from the 720 STG and up to 35 personnel from Airborne RED HORSE units would train as part of the CRG quarterly on a temporary duty (TDY) basis.

Table 2.1-1 Proposed 820 CRG Personnel			
<i>Unit</i>	<i>Permanent Base Assignment</i>	<i>Total Number to Train as CRG</i>	<i>Proposed Number per Quarterly Training</i>
820 SFG	Moody AFB	685	200
720 STG	Hurlburt Field	8	8
Airborne RED HORSE	Malmstrom, Nellis, Mountain Home, and Langley AFBs and Hurlburt Field	189	35
CRG support personnel	Moody AFB	33	0
TOTAL		915	243

2.1.2 Equipment

Most equipment and supplies required to outfit the CRG would be realigned from existing SFG assets as discussed in the SFG Beddown EA (Air Force 2000c). Additional equipment required under the proposal includes a mobile airfield repair equipment set: one IC 45 Crawler Carrier, one Combat Support Trailer, one 420D IT Backhoe Loader, and two 277 Multi-terrain Loaders. This equipment would be field tested once, prepared for deployment, and then remain in storage until needed. Also added to the inventory would be 300 personnel parachutes and 100 equipment parachutes.

2.1.3 Facilities

The storage and maintenance of the new equipment would require minor renovations and construction at existing facilities on Moody AFB. Facilities would be required for storage, pallet build-up, handling, and deployment of air-droppable equipment, and parachute maintenance and storage. Facilities found on Moody AFB meeting the size requirements for these functions are buildings 758 and 721; however, interior renovations to the buildings and the construction of a loading dock on building 758 would be needed to fulfill equipment and parachute storage and maintenance requirements (Figure 1.2-2).

The equipment storage facility would require renovation to 20,000 square feet (SF) of building 758 to store 15-20 heavy drop equipment pallets and associated storage for rigging equipment and supplies. The facility would be equipped with a 10-ton bridge crane and a pallet roller system. The addition of a 90 ft. by 90 ft. loading ramp and dock are also proposed. The final designs of these additions are not available, however, it is expected that less than one acre of developed land would be affected.

Parachute storage and maintenance would require interior renovations to 10,000 SF of building 721 to accommodate maintenance, packing, and storage of personnel and equipment parachutes. The interior renovations would include applying a static-free floor coating, installing a climate-control system, creating space for parachute folding tables, and storage for 400 personnel parachutes and 100 equipment parachutes. Building 721 is adjacent to Building 758 and is currently empty.

2.1.4 Training

Existing SFG training conducted at Moody AFB and Camp Blanding includes: land navigation, driver's proficiency, weapons qualification, air base defense, and force-on-force training. The impacts of these training activities were analyzed in the SFG Beddown EA (Air Force 2000c). No change to this training is proposed. Proposed additional training for the CRG would include parachute proficiency, equipment drops, and quarterly and annual field training. The Airborne RED HORSE and 720 STG would train as part of the CRG during quarterly and annual exercises. Parachute proficiency training for the Airborne

RED HORSE and 720 STG would occur at their current locations. Details of the proposed training are provided in Table 2.1-2.

Aircraft support for the CRG training would be scheduled in advance with Air Mobility Command based on aircraft availability. C-130 and C-17 aircraft are proposed to be used during training to drop personnel or equipment. 347 RQW C-130 aircraft may be used periodically for dropping personnel when other aircraft are not available.

Table 2.1-2 Proposed Training					
<i>Training Type</i>	<i>Activities</i>	<i>Location</i>	<i>Frequency</i>	<i>Duration</i>	<i>Approximate Personnel</i>
Monthly Training					
<i>Parachute Proficiency</i>	Personnel static line jumps	Moody AFB (Airshow and Easy DZ) and/or Camp Blanding (Weinburg DZ)	48 times per year (2 days and 2 nights per month)	16 hrs/ month	200 (CRG)
<i>Equipment Drop</i>	Equipment drops	Moody AFB (Airshow DZ) and/or Camp Blanding (Weinburg DZ)	8 times per year	Concurrent with one parachute proficiency mission (4 hrs.)	100 (CRG)
Quarterly Training					
<i>Field Training</i>	Personnel static line jumps, equipment drops, field activities: force protection, rapid runway repair, cargo aircraft landings or vehicle convoy with larger equipment.	Camp Blanding (Weinburg DZ) or Avon Park AFR (Hard Luck DZ)	3 times per year	3-5 days	243 (CRG, Airborne RED HORSE, STG)
Annual Training					
<i>Field Training</i>	Personnel static line jumps, equipment drops, field activities: force protection, rapid runway repair, cargo aircraft landings or vehicle convoy with larger equipment.	Camp Blanding (Weinburg DZ) or Avon Park AFR (Hard Luck DZ)	1 time per year	7 days	243 (CRG, Airborne RED HORSE, STG)

2.1.4.1 Monthly Training

Parachute Proficiency

The development of an airborne capability requires proficiency training for each parachutist. Parachute proficiency is achieved by 1-day and 1-night jump per month. The SFG currently has 146 jump qualified positions. The proposed action would add 180 for a total of 326 jump qualified personnel positions. Two-thirds of those positions (approximately 200) would require jump proficiency training at Moody AFB at any given time. The other one-third of the CRG would be deployed at any given time. Airborne RED HORSE and 720 STG units would maintain their jump qualifications at their home installations.

CRG personnel propose to accomplish their parachute proficiency training in four 4-hour missions (two daytime and two nighttime missions) using the Airshow and Easy DZs at Moody AFB or the Weinburg DZ at Camp Blanding. The monthly equipment drop training would occur concurrently with one of the four 4-hour missions, therefore, that mission could occur at either Moody AFB or Weinburg DZ at Camp Blanding. The 4-hour mission accommodates time needed for loading the aircraft, and safely dropping 100 personnel. Therefore, 200 personnel could maintain their jump qualifications with this schedule. Altitudes of the drops would vary from 800 to 3,000 ft. above ground level (AGL). In each 4-hour mission, approximately three takeoffs and landings and five passes of the aircraft will occur for parachute proficiency training within the DZ (Table 2.1-3). Since one 4-hour mission can occur at Moody AFB or Camp Blanding, the analysis is based on doing all proficiency training at Moody plus one mission at Camp Blanding. Baseline and proposed information at Moody AFB are shown in Table 2.1-4.

Equipment Drops

Drops of equipment or pallets simulating size and weight of equipment would occur monthly at either Airshow DZ at Moody AFB or Weinburg DZ at Camp Blanding. The DZ to be used would be based on availability at the time of scheduling. The monthly equipment drop training would occur concurrently with one of the four 4-hour missions of parachute proficiency and would not require additional airfield time outside of the proposed 16 hours per month (Cullen 2003). For this analysis, worst case scenario (all drops at Moody and all drops at Camp Blanding) will be analyzed. Equipment which could be dropped includes: all terrain vehicles, crawler carrier and trailer, backhoe loader, multi-terrain loader, bobcat, and container delivery system bundles (personal gear and clothing). The equipment or representative pallet would be assembled in building 758 and airdropped by a C-130 or C-17 aircraft. Dropping this amount of equipment takes approximately three passes above the DZ by the aircraft (Table 2.1-3). When equipment is dropped at Camp Blanding, it would be retrieved by CRG personnel and returned to Moody AFB via convoy along existing state highways using buses, 40 ft. trailers, and other standard vehicles (pickups, vans, sedans, etc.). Equipment drop training would involve the 100 personnel associated with the accompanying parachute proficiency training. Baseline and proposed information at Moody AFB and Camp Blanding are shown in Table 2.1-4.

2.1.4.2 Quarterly Field Training

Quarterly, the equipment drop training would include on-ground field exercises. Approximately 243 personnel (35 Airborne RED HORSE, eight STG, and 200 CRG) would be involved in each quarterly exercise. The quarterly training exercise would occur at either the Weinburg DZ at Camp Blanding or Hard Luck DZ at Avon Park AFR. Aircraft operations proposed for quarterly training are provided in Table 2.1-3. At Camp Blanding, an approved C-130 landing strip would be used for cargo landings; the remaining training would be conducted at Weinburg DZ. If needed, the Airborne RED HORSE could conduct rapid runway repair at the existing 202nd RED HORSE training location in the cantonment area. At Avon Park AFR, all training would occur at the Hard Luck DZ. The location of quarterly and annual training would depend on availability of Avon Park AFR or Camp Blanding. Therefore, for the purposes of this analysis, it is presumed that environmental impacts would be equal to or less than those analyzed in Alternatives A and B in which quarterly exercises would occur in one location.

The quarterly exercise would allow the CRG to combine their areas of expertise and train together as a cohesive unit to ensure efficiency during deployment. The field training exercise would last 24 hours per day for three to five days. Parachute proficient personnel and equipment would be air dropped into the approved DZ. Non-jump qualified personnel and larger equipment items would be brought to the training area via convoy or cargo plane. After the dropped equipment is broken down, the units would then divide into their areas of expertise to begin on-ground field training. Field training would include: establishing force protection, emergency medical response, air traffic control (ATC), and rapid runway repair. Activities for rapid runway repair would include airfield damage assessment, clearing obstructions, repairing airfield surfaces (asphalt paving), and installing emergency lighting systems. Damage to runways would be simulated by mechanically creating craters in concrete. Rapid runway repair training would only occur at an approved area already being used for this training.

During the quarterly and annual field training events, weapons used would include rifles (M4s), grenade launchers (M203s), squad automatic weapons (M249s), and machine guns (M204s), all equipped with the Multiple Integrated Laser-Engagement Systems. Blank rounds would be used during the field training exercises. Approximately 1100 blank rounds would be used during each training event.

If needed, the CRG would use sand bags to simulate trenching and building berms. Existing facilities on base (housing, latrines, campsites, etc.) would be used during overnight training exercises (Air Force 2000c). No construction or ground disturbance would occur outside of rapid runway repair activities. All personnel and equipment would return to Moody AFB via convoy along existing state highways upon completion of the training.

2.1.4.3 Annual Field Training

Annually, one of the quarterly trainings would be conducted to better simulate a real deployment scenario. Approximately 243 personnel (35 Airborne RED HORSE, eight STG, 200 CRG) would be involved in the annual training. Proposed aircraft operations for annual training are provided in Table 2.1-3. The annual training would last for seven days at Camp Blanding or Avon Park AFR. Equipment to be dropped would be the same as that used for the monthly and quarterly exercises. Once a safe landing area has been secured, cargo aircraft would land to deploy additional vehicles and equipment which may include up to: three 2 ½ ton trucks, ten 5 ton trucks, four soft top high mobility multipurpose wheeled vehicles (HMMWV) without weapon mounts, ten up-armored HMMWV, four turtle back HMMWV with weapons mount, four trailers, four water buffaloes, four bobcats, twenty all terrain vehicles, and three gators.

Table 2.1-3 Proposed Annual Number of Aircraft Operations for CRG Training					
Location	Training	Alternative A		Alternative B	
		LTO	TGO	LTO	TGO
Moody AFB	Parachute Proficiency	144	240	144	240
	Equipment Drop ¹	8	24	8	24
	Quarterly	1	0	1	0
	Annual	1	0	1	0
	Total	154	264	154	264
Camp Blanding	Parachute Proficiency ²	0	40	0	40
	Equipment Drop	0	24	0	24
	Quarterly	3	9	0	0
	Annual	1	3	0	0
	Total	4	76	0	64
Avon Park AFR	Parachute Proficiency	0	0	0	0
	Equipment Drop	0	0	0	0
	Quarterly	0	0	3	9
	Annual	0	0	1	3
	Total	0	0	4	12
LTO=landing and takeoff TGO=touch and go (used for passes) ¹ Since equipment drops can occur at either Moody AFB or Camp Blanding, analysis is based on doing all drops at Moody and all drops at Camp Blanding to demonstrate a worst case scenario at each location. ² Since one 4-hour mission can occur at Moody AFB or Camp Blanding, analysis is based on doing all proficiency training at Moody plus one mission at Camp Blanding.					

On-ground training activities would be the same as those described for the quarterly training with the addition of the use of pyrotechnics. Approximately 540 ground burst simulators (M115A2) and 1180 smoke canisters (M18) would be used during the annual training. Pyrotechnic devices used during the proposed training activities would be placed in predetermined sandbagged positions approximately 2 feet

by 2 feet high. All personnel and equipment would return to Moody AFB via convoy along existing state highways upon completion of the training. Table 2.1-4 shows existing and proposed information for Camp Blanding and Avon Park AFR.

Table 2.1-4 Summary of Proposed Action for Alternatives A and B						
<i>Location</i>		<i>Baseline</i>	<i>Alternative A</i>		<i>Alternative B</i>	
			<i>Proposed Change</i>	<i>Increase</i>	<i>Proposed Change</i>	<i>Increase</i>
Moody AFB	Personnel (Full Time)	5,068	+33	0.65%	+33	0.65%
	Sorties¹ (average/day)	218	+0.43	0.19%	+0.43	0.19%
	Munitions (not proposed)	N/A	0	0	0	0
Camp Blanding	Personnel (average/day)	684	+5	0.72%	+2	0.29%
	Sorties (average/day)	8.3	+0.21	2.5%	+0.18	2.1%
	Munitions² (annual use)	1,276,436	+6,120	0.48%	-	-
Avon Park AFR	Personnel (average/day)	219	-	-	+3	1.4
	Sorties (average/day)	2.9	-	-	+0.03	1.0%
	Munitions² (annual use)	4,652,580	-	-	+6,120	0.13%
<p>Sources: (Air Force 2000c) (Air Force 2000b) (McCurley 2003) (Feltner 2003) (Air Force 2002a)</p> <p>Notes: ¹ Proposed sorties for Moody derived from LTOs; TGOs used for sorties at Camp Blanding and Avon Park AFR. Increase in SFG sorties only. ² Proposed munitions are all blank rounds, except for smoke canisters (1180) and ground burst simulators (540); change is given in context of all on-ground munitions use.</p>						

2.2 ALTERNATIVES CONSIDERED BUT ELIMINATED

North Auxiliary Air Field, SC was considered for the quarterly and annual trainings, however, no housing facilities are available to support these exercises. In addition, North Auxiliary Air Field is used to train C-17 pilots from Charleston AFB preventing closure of the airfield for seven days of ground training activities. This alternative was eliminated based on scheduling conflicts with C-17 training.

2.3 ALTERNATIVES

Alternative A

Under Alternative A, parachute proficiency and equipment drop training for the CRG personnel would occur at Airshow and Easy DZs at Moody AFB, respectively, and/or Weinburg DZ at Camp Blanding; Airborne RED HORSE and 720 STG would obtain parachute proficiency at their permanent bases. The quarterly and annual training would be conducted at Weinburg DZ at Camp Blanding. The DZs and training areas are approved for the type of training proposed.

Alternative B

Under Alternative B, parachute proficiency and equipment drop training for the CRG personnel would occur at Airshow and Easy DZs at Moody AFB, respectively, and/or Weinburg DZ at Camp Blanding; Airborne RED HORSE and 720 STG would obtain parachute proficiency at their permanent bases. The quarterly and annual training would be conducted at Hard Luck DZ at Avon Park AFR. The DZs and training areas are approved for the type of training proposed.

Alternative C

Under Alternative C, the No Action alternative, the 820 SFG would not transition into a CRG. There would be no changes to personnel at Moody AFB, no additional equipment, no facility renovations, and no changes to current training.

3.0 AFFECTED ENVIRONMENT

This chapter describes relevant existing environmental conditions for resources potentially affected by the proposed action. In compliance with guidelines contained in NEPA and CEQ regulations, the description of the affected environment focuses on those environmental resources potentially subject to impacts.

3.1 AIRSPACE MANAGEMENT

3.1.1 Definition of Resource

Aircraft traveling to and from the base to support the CRG would be considered transient. The proposed action has the potential to impact use of the immediate airfields at the installations to include the runways and drop zones. Therefore, airspace management will address the users and scheduling concerns for the action.

The Federal Aviation Administration (FAA) has primary jurisdiction over the management of airspace employing flight rules and regulations, ATC procedures, and designating special use airspace dedicated for a particular category of user, such as the military. Controlled airspace is that within which the FAA may exercise ATC procedures. There are five classifications of controlled airspace with varying levels of provided service, degrees of regulation imposed, minimum pilot certification equipment, and communications. Most airspace that is greater than 1200 feet AGL is controlled airspace and in the vicinity of busier airports, controlled airspace extends to the ground. Uncontrolled airspace typically extends from ground surface to 700 feet AGL in urban areas and to 1200 feet AGL in rural areas. No ATC support is provided and no clearance or communications requirement exist for operations in uncontrolled airspace.

3.1.2 Region of Influence

The region of influence (ROI) for airspace management includes the airfields and drop zones at Moody AFB, Camp Blanding, and Avon Park AFR.

3.1.3 Affected Environment

Moody AFB

Moody AFB currently has two active runways, both with a north-south orientation. Airspace affected by this action is A-684 (surface to 4000 feet AGL), the Easy DZ, and Airshow DZ. Moody AFB ATC controls and schedules airspace at Moody AFB by holding a meeting every Monday (Petijon and McCurley 2003). Moody AFB airspace is open Monday through Thursday (7:00 am - 1:00 am), Friday

(7:00 am - 10:00 pm), closed Saturday, and Sunday (9:00 am – 5:00 pm). Airfield operations primarily include those of HC-130, T-38, T-6A, and HH-60 while transient aircraft from other bases consist of both civilian and military aircraft. There are approximately 218 sorties per day at Moody AFB (Table 2.1-4, page 2-7).

Camp Blanding

Camp Blanding is covered by Restricted Area R-2904. Camp Blanding has one airfield with two runways, one helicopter landing strip, and one C-130 landing strip. In addition, there are five DZs, tactical landing zones, and an aerial gunnery range. Camp Blanding Range Control is responsible for scheduling all training areas for ground training and aviation operations (Air Force 2000c). Camp Blanding records aircraft data as aircraft movements. For purposes of this analysis, it is assumed that a movement equals a sortie. There are approximately 8 sorties per day at Camp Blanding (Table 2.1-4, page 2-7).

Avon Park AFR

Avon Park AFR has two runways and lies beneath Restricted Area R-2901. Avon Park AFR airspace and range hours of operation are Monday through Friday (6:00am – 12:00am) and Saturday through Sunday (8:00am – 6:00pm). The airspace and ranges are available for use outside of these hours with six hours advance notice. Avon Park Range Control is responsible for scheduling training. There are approximately 3 sorties per day at the airfield associated with the Hard Luck DZ (Table 2.1-4, page 2-7).

3.2 SAFETY

3.2.1 Definition of Resource

In this EA, safety issues associated with the proposed parachute and field training are examined. Because the proposed action adds only minor transient aircraft activity, it is not expected to appreciably change the number or type of safety issues associated with aircraft activities.

3.2.2 Region of Influence

The ROI for safety includes the DZs on Moody AFB and Camp Blanding where parachute proficiency and equipment drop training is proposed and the DZs and training areas on Camp Blanding and Avon Park AFR where field training activities are proposed.

3.2.3 Affected Environment

Moody AFB

The Moody AFB Easy and Airshow DZs are the proposed locations for parachute proficiency and equipment drop training. These DZs are maintained grass and pavement with no major obstacles adjacent to the airfield. All military personnel are thoroughly briefed on the hazards that can potentially cause health and safety problems during training exercises. Established safety procedures minimize potential risks to military personnel (Air Force 2000c).

Camp Blanding

The Weinburg DZ would be used for the proposed equipment drop, quarterly and annual trainings. There are no obstacles to avoid within the Weinburg DZ, however, it is surrounded by 30 feet tall trees. Camp Blanding has developed standard operating procedures (SOPs) which apply to all users of the installation's range facilities (Air Force 2000c). These SOPs address safety concerns for public recreation areas as well as military operations. When training areas are in use by military personnel, they are not open to the public.

Avon Park AFR

The Hard Luck DZ would be used for quarterly and annual training exercises. During operations at Avon Park AFR, units are required to provide their own medical response and care. Ordnance and munitions are transported and stored at designated facilities by training area users. Major mishaps are managed in accordance with the 347 WG Disaster Response Plan (Air Force 2000b). SOPs concerning public access areas are also in place on Avon Park AFR. When military personnel are using the area, public access is not permitted.

3.3 NOISE

3.3.1 Definition of Resource

Noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise annoying. Human response to noise varies according to the type and characteristics of the noise sources, distance between source and receiver, receiver sensitivity, and time of day.

Sound is measured with instruments that measure variations in air pressure, which are used to calculate instantaneous sound levels in decibels (dB). A-weighted sound level measurements (often denoted dBA) are used to characterize sound levels that the human ear responds to especially well by emphasizing mid-frequencies and de-emphasizing the low and high frequencies. The C-weighted sound level, denoted

dB(C), is used less frequently but is practical when measuring impulsive sounds such as blasts. Unlike A-weighting, the C-weighting does not de-emphasize the low frequencies within the audible spectrum.

Noise can be presented as day-night average sound level (DNL), a cumulative metric that accounts for the total sound energy occurring over a 24-hour period with a 10-dB penalty added to those operations between 10:00 pm and 7:00 am. The DNL is the preferred metric of the U.S. Department of Housing and Urban Development, the FAA, and the U.S. Environmental Protection Agency (EPA). Most studies have demonstrated that people are exposed to DNL of 50 to 55 dBA or higher on a daily basis. Research has indicated that approximately 87 percent of the population is not highly annoyed by outdoor sound levels below 65 dBA DNL (FICON 1992). Therefore, 65 dBA DNL is typically used to help determine compatibility of military operations with local and community land use.

Other descriptors used to describe time-varying sound levels are the equivalent sound level (LEQ) and the sound exposure level (SEL). LEQ represents the continuous sound level having the same acoustic energy and time interval as the actual fluctuating sound event. For example, 8-hr LEQ signifies that the continuous sound level is measured over an 8 hour period. SEL is a measure of the total acoustic energy transmitted to the listener. It represents the sound level of a constant sound that would, in one second, generate the same acoustic energy, as did the actual time-varying noise event.

3.3.2 Region of Influence

The ROI for noise concerns is the area immediately surrounding the airfield and DZs on Moody AFB, Camp Blanding, and Avon Park AFR.

3.3.3 Affected Environment

Moody AFB

The greatest source of noise at Moody AFB is that associated with aircraft operations at the airfield and the DZs. A series of contours illustrating the noise from aircraft operations in 5 dB DNL increments indicate that the airfield and DZs were determined to be located within the 75 dB DNL contour (Air Force 2000a).

Camp Blanding

Camp Blanding is divided into 32 training areas. Noise at Camp Blanding is primarily a result of rotary-winged aircraft operations and artillery firing activities. Firing of large caliber weapons such as 105 mm howitzers represent typical artillery operations (Air Force 2000c).

A study was performed analyzing the noise generated from 8,000 rounds of artillery firing over a two-week period at Camp Blanding. The study found that artillery operations represented the greatest source

of noise at the installation. It also concluded that no residential areas are located within a region of high noise exposure (>65 dBA). Additionally, noise associated with small arms training has the potential to carry harmful effects within the immediate vicinity of the activity. However, the noise is expected to diminish to an 8-hr LEQ of 50 dBA or less at 2000 feet (Air Force 2000c).

Avon Park AFR

Noise sources at Avon Park AFR include rotary-wing and fixed-wing aircraft, artillery activities, and air-to-ground target impacts. These are considered the greatest contributors to the existing noise environment. All of these are continuing activities at Avon Park AFR as part of military training operations. The primary source of aircraft noise is from C-130 aircraft. Crews of the C-130 use the Hard Luck DZ, located adjacent to the airfield, for practicing airdrop maneuvers. These aircraft typically generate SEL's of 98 and 82 dBA at 200 feet and 1500 feet AGL, respectively.

An evaluation of the noise generated by large caliber weapons was conducted in an Environmental Noise Assessment Special Study by the U.S. Army Bio-Acoustics Division (Air Force 2000b). The evaluation modeled a 65 dB DNL contour created by existing artillery operations. The results of the study concluded that the 65 dB DNL contour remains within the boundaries of the installation and covers an area of approximately 7000 acres to the west. Greatest noise levels were determined to be created by the 8-in howitzer, high air burst with an SEL of 141 dBC at 150 meters. At Avon Park AFR. The largest artillery in use is the 105 mm cannon.

3.4 HAZARDOUS MATERIALS AND WASTE

3.4.1 Definition of Resource

Hazardous materials are substances defined by the Comprehensive Environmental Response, Compensation, and Liability Act, as amended by the Superfund Amendments and Reauthorization Act of 1986, and the Toxic Substances Control Act of 1976. Hazardous wastes are defined by the Solid Waste Disposal Act of 1976 as amended by the Resource Conservation and Recovery Act (RCRA), which was further amended by the Hazardous and Solid Waste Amendments. In general, both hazardous materials and wastes include substances that, because of their quantity, concentration, physical, chemical, or infectious characteristics, may present substantial danger to public health or welfare or to the environment when released or otherwise improperly managed.

Hazardous materials management at Air Force installations is established primarily by Air Force Instruction (AFI) 32-7086, Hazardous Materials Management. The AFI incorporates the requirements of all Federal regulations, other AFIs, and DoD Directives, for the reduction of hazardous material uses and purchases.

3.4.2 Region of Influence

The ROI for hazardous wastes and materials includes those areas of Moody AFB, Camp Blanding, and Avon Park AFR where use of equipment, munitions, and pyrotechnics would take place. Specifically, buildings 721 and 758, the Weinburg DZ, and the Hard Luck DZ.

3.4.3 Affected Environment

Moody AFB

Moody AFB operations require the use and storage of hazardous materials including flammable and combustible liquids, acids, aerosols, alcohols, batteries, corrosives, caustics, compressed gases, fire retardants, herbicides, hydraulic fluids, photographic chemicals, sealants, solvents, paints, paint thinners, pesticides, and a number of petroleum, oils, and lubricants. The largest amount of hazardous waste at Moody AFB comes from aircraft support functions such as hydraulics work, structural maintenance, munitions maintenance, corrosion control, painting, and wheel and tire maintenance (Air Force 1999). Moody AFB produces an average of 7,820 pounds of hazardous waste per month, which designates it a large quantity generator of hazardous waste (Air Force 1998).

The Moody AFB Hazardous Waste Management Plan (HWMP) describes procedures to achieve and maintain regulatory compliance for the accumulation, transportation, and disposal of hazardous materials and waste (Air Force 2003a). The Moody AFB Spill Prevention, Control, and Countermeasure Plan and Facility Response Plan also describe a variety of spill prevention procedures, methods, and equipment used at the installation. The documents also include procedures to be followed when responding to releases, accidents, and spills involving oils or hazardous substances in order to minimize adverse effects of spills. These procedures include spill detection, reporting, containment, cleanup and disposal (Air Force 1997a).

Camp Blanding

Camp Blanding uses various types of hazardous materials to support base operations. These materials include paints, liquid petroleum products, and other ignitables. Management of hazardous wastes at Camp Blanding follows Federal, state and Army regulations. These regulations require hazardous waste to be handled, stored, transported, disposed of, or recycled according to defined procedures. The Camp Blanding HWMP establishes procedures and provides specific guidance regarding the management, collection, and disposal of hazardous waste. Army regulations also provide for the proper design, maintenance, and inspection of storage facilities to prevent or minimize accidental releases of hazardous materials.

The Camp Blanding HWMP contains a Spill Prevention, Control, and Countermeasure Plan that is designed to prevent spills of oil and hazardous substances and defines specific actions to be taken to

minimize hazards to human health or the environment from fire, explosions, or any unplanned sudden or non-sudden release of hazardous substances into the air, soil, or surface waters surrounding Camp Blanding.

Camp Blanding generates an average of 1,500 pounds of hazardous waste per month (Air Force 2000c). Although this average is less than the EPA standard for large quantity generators, Camp Blanding is still designated as such because the installation exceeds the 2,205 pounds per month threshold at least one month each year.

Avon Park AFR

Industrial operations conducted at Avon Park AFR are limited to maintenance activities for vehicles and portable electrical generators. Hazardous materials and waste management activities follow guidelines set by Federal and state environmental regulations and are managed in accordance with current Air Force hazardous waste management policies.

In 1995 Avon Park AFR developed both a Spill Response Plan and an Oil and Hazardous Substances Pollution Contingency Plan. Recovered fuels and oils are collected and stored in drums and tanks on Avon Park AFR. Recyclable petroleum, oil and lubricant collection points are scattered around the range. A private contractor collects and recycles these materials.

Avon Park AFR complies with large quantity generator requirements in accordance with their RCRA permit. In 2002 the base produced 202 pounds of hazardous waste per month, less than the EPA standard for a large quantity generator (Grebing 2003).

3.5 EARTH RESOURCES

3.5.1 Definition of Resource

Earth resources for an area include the geology, topography, and soils. Geology describes the bedrock materials, mineral deposits, and fossil remains. Topography describes the elevation and slope of the terrain, as well as other visible land features. The soils for all three bases have been previously surveyed by the U.S. Department of Agriculture and assigned a taxonomic group. Soils are classified by large areas and on a finer scale into association.

3.5.2 Region of Influence

The ROI for the proposed action includes designated training areas and DZs on Moody AFB, Camp Blanding, and Avon Park AFR and the location of proposed construction on Moody AFB.

3.5.3 Affected Environment

3.5.3.1 Geology

Moody AFB

Moody AFB is located within the Georgia Lower Coastal Plain. According to the Moody AFB Integrated Natural Resource Management Plan (INRMP) (Air Force 2001b), 80% of this area consists of moderately dissected, irregular plains of marine origin. Mesozoic and Cenozoic rock formations consist of Cretaceous marine sediments and Tertiary marine deposits. Two hundred feet below the ground surface is Suwannee Limestone that is 200 to 250 ft. thick.

Camp Blanding

Camp Blanding is located within the Trail Ridge local physiographic area which is characterized as a long linear highland feature composed of Pleistocene shoreline deposits. Camp Blanding is part of the Upper Etonia Creek Basin and is part of the Interlachen Sand Hills of the Central Lakes District. It overlies Suwanne and Ocala Limestone.

Avon Park AFR

Avon Park AFR is located in the Atlantic Coastal lowlands physiographic province. It contains unconsolidated sands above marine sediment deposits of Pliocene-Pleistocene age located 50-150 ft. below the surface. Below this are deposits from the Hawthorn Group, the Peace River Formation, Arcadia Formation, Ocala Group and Avon Park Limestones. Due to the dissolution of limestone layers, the surface area is covered with sinkholes and other depressions.

3.5.3.2 Topography

Moody AFB

Moody AFB is located on a plateau between the Withlacoochee and Alapaha Rivers. Elevations on Moody AFB vary from 190 to 240 feet above mean sea level (MSL). Slopes on base are no greater than 5%.

Camp Blanding

The topography at Camp Blanding is relatively flat with undulating plateaus. Elevation ranges from approximately 50 feet to 250 feet above MSL. Slopes at Camp Blanding range from 0 to 8%.

Avon Park AFR

The topography at Avon Park AFR is somewhat variable. A majority of Avon Park AFR is located in Osceola and Okeechobee Plains in which the elevations range from 45 to 75 above MSL. A topographic feature known as the Bombing Range Ridge lies in a north/south direction in the center of the installation

with elevations ranging from 125 to 150 feet above MSL. Also found on the surface of Avon Park AFR are numerous shallow depressions that are the result of subsurface sinkhole formation.

3.5.3.3 Soils

Moody AFB

Moody AFB is located in the Tifton Upland District of the Lower Coastal Plain. In general, soils on uplands in this region were formed in deep sedimentary sands and clays. Hydric soils cover at least 60-70% of Grand Bay Range and 20-30% of the main base. Arsenic, barium, chromium, copper, iron, selenium, and zinc have been found to be naturally occurring in the area. Predominant soils are Tifton-Pelham-Fuquay, Dasher or Swamp-Istokpoga, Mascotte-Albany-Pelham, and Leefield-Pelham-Clarendon.

Camp Blanding

Predominant soils at Camp Blanding are Allanton, Centenary, Hurrican, Kershaw, Leon, and Penney. Characteristics of these soils include a uniformly poor nutrient content with a very high sand and low clay/silt composition. Soil erosion at the installation is most likely due to the very high sand composition. Effects of potential erosion are mitigated by limited use of tracked vehicles at Camp Blanding. In addition, the amount of rainfall and warm temperate/subtropical setting results in rapid vegetation, reducing impacts of soil erosion.

Avon Park AFR

Avon Park AFR is part of the Highlands County and Polk County Soil Surveys. In 1983, The Soil Conservation Service divided the soils into four associations: upland soils; flatwood and slough soils; marsh, swamp, and floodplain soils; and cutthroat seep soils. Predominant soils are Basinger, Placid-Myakka, and Smyrna-Myakka.

3.6 WATER RESOURCES

3.6.1 Definition of Resource

Water resources include surface water, groundwater, and floodplains. Wetlands are covered in Section 3.7, Biological Resources. Surface water includes all lakes, ponds, rivers, and streams. Groundwater includes subsurface hydrologic resources, such as aquifers, that are used for domestic, agricultural, and industrial purposes. Floodplains are areas of low-lying ground that are exposed to repeated inundation by water. A 100-year floodplain refers to areas subject to major flooding once every 100 years. Floodplains are not addressed because none of the proposed training locations or the proposed construction sites are located within Federal Emergency Management Agency designated 100-year floodplains. None of the proposed activities are expected to impact groundwater. In this analysis, the locations for the proposed

action and the activities described would only potentially impact surface water. Therefore, the water resources analysis will focus on lakes and streams near the proposed DZs, areas, and the proposed construction site.

3.6.2 Region of Influence

The ROI for water resources on Moody AFB, Camp Blanding, and Avon Park AFR includes: Mission and Quiet Pines Lakes, Beatty Branch, and Grand Bay Swamp on Moody AFB; Sand Hill Lake at Camp Blanding; and Lake Arbuckle at Avon Park AFR.

3.6.3 Affected Environment

Moody AFB

Moody AFB is located in the Suwannee River Basin, which discharges to the Gulf of Mexico. Base facilities are located on a level plateau between the Withlacoochee River to the west and the Alapaha River to the east. Banks Lake and its tributary of Big Creek are located northeast of Moody AFB. The southern portion of Banks Lake drains south into Moody AFB. Grand Bay is located south of Moody AFB and drains east and northeast onto the base. There are several small bays located on base that are fed by the southern portion of Banks Lake and from Grand Bay. Lakes in the main base area include Mission Lake and Quiet Pines Lake.

All surface water on the eastern portion of Moody AFB flows to Grand Bay Creek, in the southeastern portion of the installation. On the southern part of the base surface water flows to Mission Lake, which flows into Grand Bay. Surface water on the northern portion of the base flows into Beatty Branch, which exits the base in the northwest corner. Figure 3.6-1 shows water resources at Moody AFB.

Camp Blanding

There are four major riparian water sources on Camp Blanding (Figure 3.6-2). Bull Creek and the North Fork of Black Creek both flow to the north and Ates Creek and the South Fork of Black Creek both flow to the east of Camp Blanding. Through the St. John's River, these water sources drain into the Atlantic Ocean. Camp Blanding is drained to the west by tributaries of the Santa Fe River, which eventually drains into the Gulf of Mexico. Major water bodies on Camp Blanding include Kingsley Lake and Sand Hill Lake. Numerous ponds and other lakes are located on the installation. All lakes and ponds on Camp Blanding, except for Kingsley Lake, drain to the south through the headwaters of Etoniah Creek to the St. John's River and Atlantic Ocean.

Two water quality studies have been conducted at Camp Blanding to obtain existing conditions in the surface waters. The studies indicate that the surface water systems have relatively good water, sediment and aquatic habitat quality. The FArNG monitors surface water every three years to monitor any declines or improvements in Camp Blanding water quality (FArNG 2000).

Avon Park AFR

Avon Park AFR lies within the Kissimmee River Drainage Basin. Major surface water features of the area include Lake Arbuckle, Arbuckle Creek, and Morgan Hole Creek (Figure 3.6-3). The Kissimmee River, which borders Avon Park AFR on the southeast for eight miles, flows south from Lake Kissimmee to Lake Okeechobee. These river and creek drainages are associated with many low-lying floodplains, and include Willingham Creek on the northwest portion of the installation, Tomlin Gulley on the south, and Hicks Slough and Burnt Hammock Slough on the southeast. Portions of Avon Park AFR are associated with surface water features that contain water on an intermittent basis. Two permanent water features located on Bombing Range Ridge are Submarine Lake and Little Lake. Runoff from most of the range occurs as numerous small streams or as sheet flow over sandy soils. A generally low volume of runoff at Avon Park AFR results from a combination of highly permeable soils, low topographic relief, and the large areas of wetlands located on the range.

Figure 3.6-1 Moody AFB Water Resources

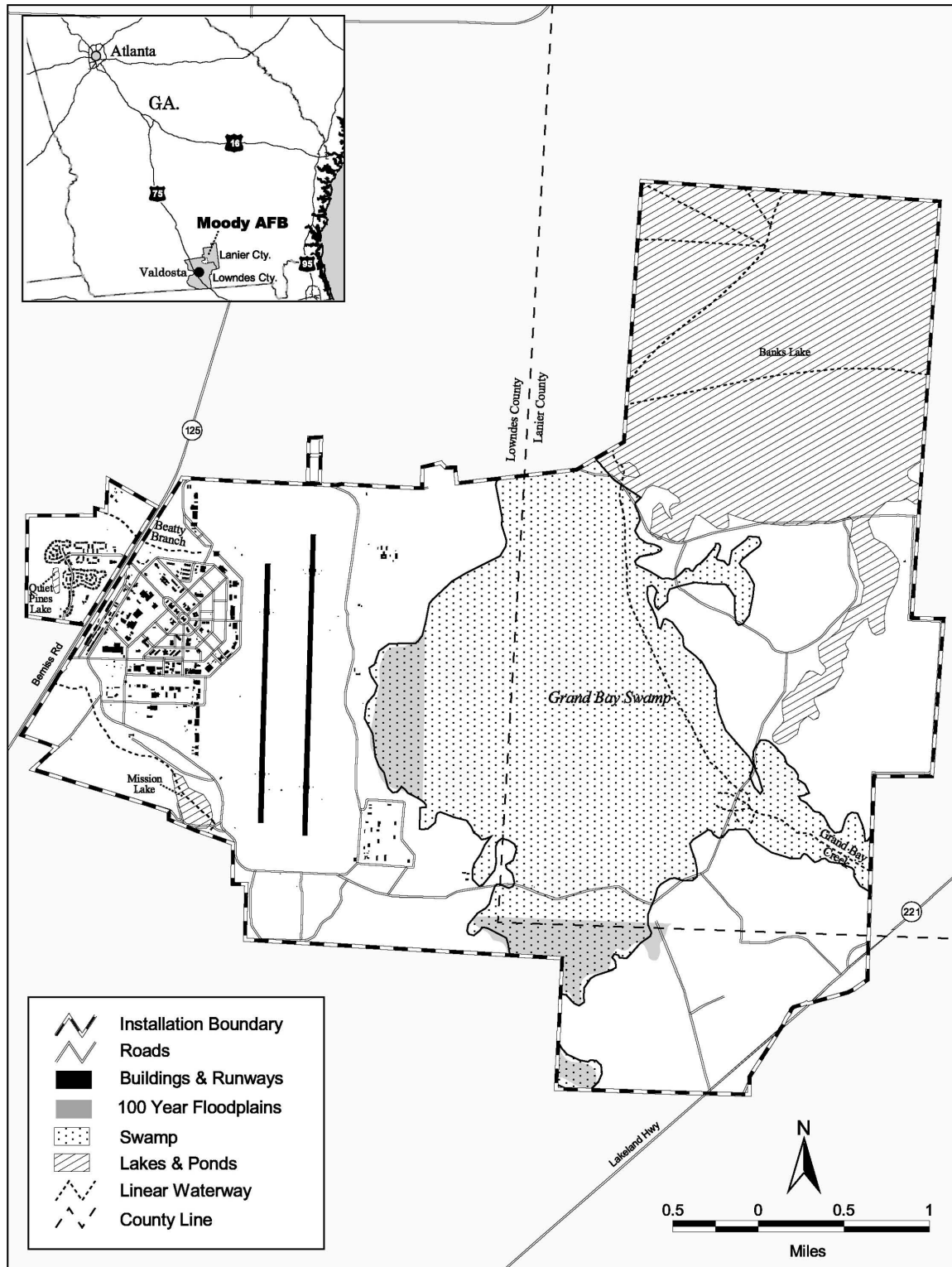


Figure 3.6-2 Camp Blanding Water Resources

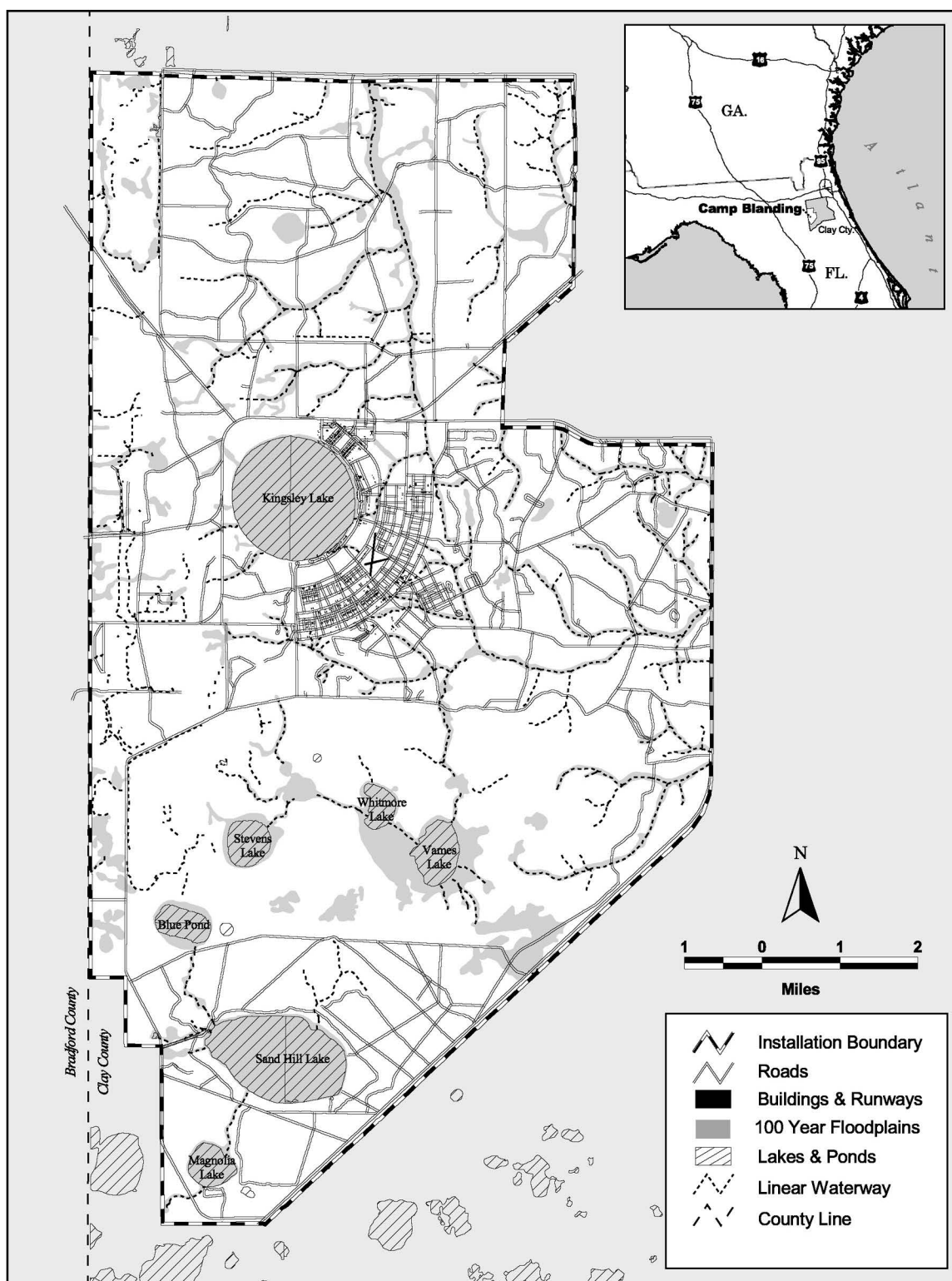
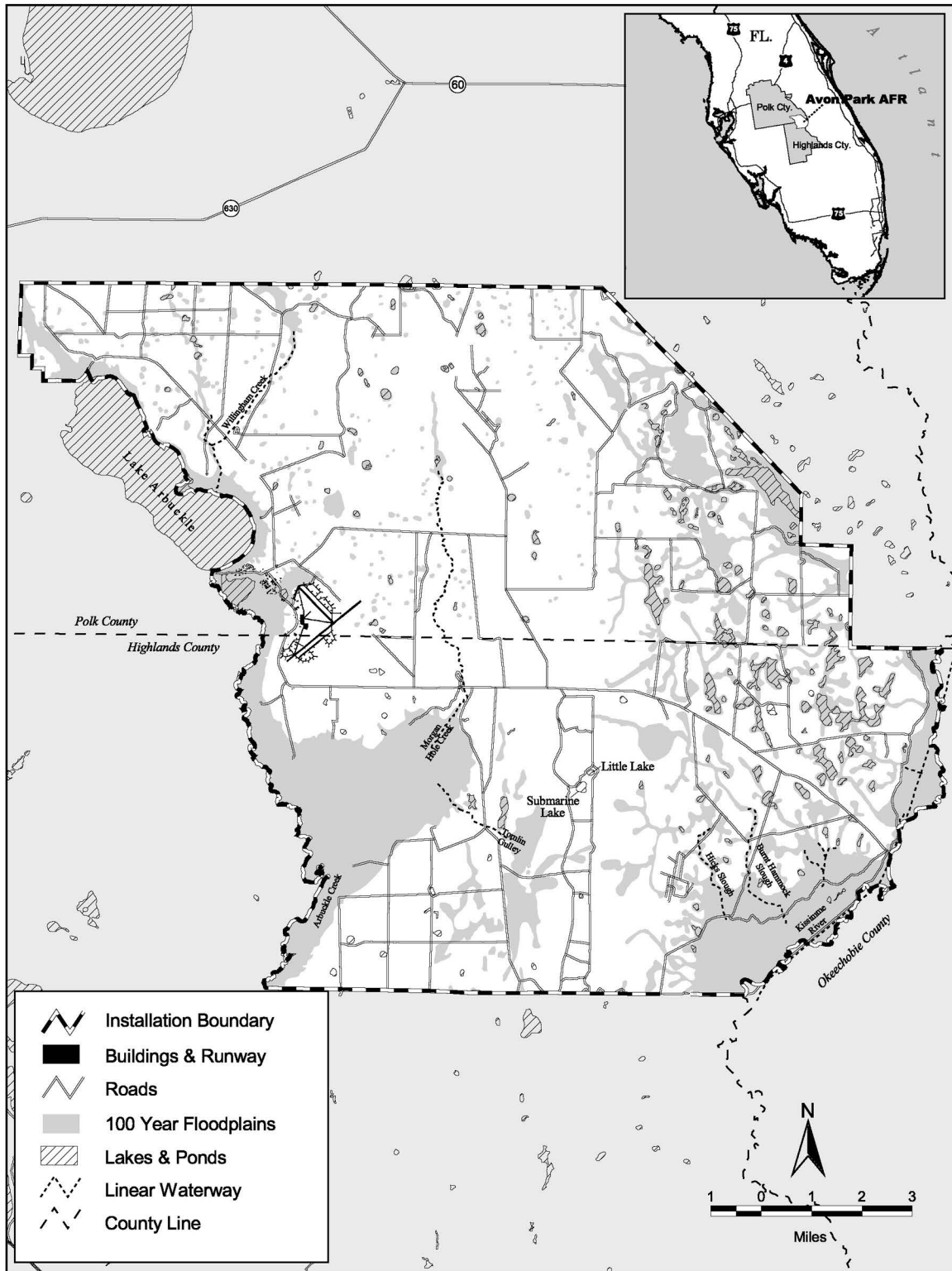


Figure 3.6-3 Avon Park AFR Water Resources



3.7 AIR QUALITY

3.7.1 Definition of Resource

The National Ambient Air Quality Standard (NAAQS) developed by the EPA sets a national limit on the concentrations of criteria pollutants in the atmosphere of a particular area. The pollutants of highest concern to the EPA are Carbon Monoxide (CO), Nitrogen Dioxide (NO₂), Sulfur Dioxide (SO₂), Particulate Matter less than or equal to 10 micrometers in diameter (PM₁₀), Ozone (O₃), and Lead (Pb).

The Clean Air Act (CAA) of 1990 requires states to achieve and maintain the NAAQS within their borders. Each state may adopt requirements stricter than those of the national standard. Each state is required by the EPA to develop a State Implementation Plan that contains strategies to achieve and maintain the national standard of air quality within the state.

Air quality is affected by point sources and area sources. Point source emissions are from a single source and are usually passed through a vent or stack. Area sources are generally characterized as a conglomerate of general paint sources near each other such as an industrial area or manufacturing area. The status of an area is determined by how criteria pollutant concentrations in the atmosphere compare to the NAAQS. If these concentrations exceed the NAAQS an area is considered non-attainment, and if they do not the area is considered in attainment. Table 3.7-1 shows the NAAQS adopted by the state of Georgia, and the stricter standards adopted by Florida.

In addition to the NAAQS, the CAA established a national goal of preventing any further degradation or impairment of visibility within Federally designated attainment areas. Attainment areas are classified as Class I, II, or III, and are subject to the Prevention of Significant Deterioration (PSD) program. Determination of the significance of an impact on visibility within a PSD Class I area is typically associated with stationary emission sources. None of the proposed training locations are in a PSD Class I area.

The mixing layer (or mixing height) is defined as the altitude below which the most vigorous initial mixing of air takes place. Mixing heights within an ROI can fluctuate, however, the commonly accepted mixing height is 3,000 feet AGL. Emissions above this height can be inhibited, and effectively blocked from mixing with surface-based emissions. Therefore, aircraft emissions above the average mixing height are unlikely to contribute to ground-level pollutant concentrations (EPA 1992).

Table 3.7-1 Ambient Air Quality Standards				
Air Pollutant	Averaging Time	GA and Federal NAAQS		FLAAQS ¹
		Primary (>)	Secondary (>)	
CO	8-hour 1-hour	9 ppm 35 ppm	9 ppm 35 ppm	9 ppm 35 ppm
NO ₂	Annual	0.053 ppm	0.053 ppm	0.053 ppm
SO ₂	Annual 24-hour 3-hour	0.03 ppm 0.14 ppm ---	--- --- 0.50 ppm	0.02 ppm 0.10 ppm 0.50 ppm
PM ₁₀	AAM ² 24-hour	50 µg/m ³ 150 µg/m ³	50 µg/m ³ 150 µg/m ³	50 µg/m ³ 150 µg/m ³
O ₃	8-hour 1-hour ³	0.08 ppm 0.12 ppm	0.08 ppm 0.12 ppm	0.08 ppm 0.12 ppm
Pb	Calendar Quarter	1.5 µg/m ³	1.5 µg/m ³	1.5 µg/m ³
Notes: ppm: parts per million µg/m ³ : micrograms per cubic meter ¹ FLAAQS: Florida Ambient Air Quality Standards ² AAM: annual arithmetic mean ³ Only applies to non-attainment areas Source: EPA 2003, Florida Department of Environmental Protection 1999.				

3.7.2 Region of Influence

The ROI for air quality under the proposed action is the air quality control regions (AQCR) around Moody AFB, Camp Blanding, and Avon Park AFR. AQCRs affected by the action are regions 59, 49, 51, and 52.

3.7.3 Affected Environment

Moody AFB

Moody AFB is located within AQCR 59 and is in attainment for the criteria pollutants. Moody AFB is considered a minor source of stationary air pollution by the Georgia Environmental Protection Department. A yearly Air Emissions Inventory Report (AEIR) is produced to satisfy AFI 32-7040 requirements. Moody AFB operates under a Synthetic Minor Permit for Hazardous Air Pollutants. Baseline emissions are provided in Table 3.7-2.

Camp Blanding

Camp Blanding is located in AQCR 49 and is in attainment for criteria pollutants. There are no air monitoring stations on Camp Blanding because it is not a Title V permit holder and it does not produce an AEIR. Therefore, baseline emission data was derived from stationary sources at Avon Park AFR since Camp Blanding and Avon Park AFR exist in similar climates and similar stationary sources exist at both installations. Mobile emissions are not recorded at Camp Blanding. Baseline data is provided in Table 3.7-2.

Avon Park AFR

Avon Park AFR is located in AQCRs 51 and 52 and is in attainment for the criteria pollutants. Avon Park AFR produces an AEIR every three years to determine baseline conditions (Table 3.7-2).

Table 3.7-2 Baseline Emissions for Criteria Pollutants						
	CO	VOC	NO_x	SO_x	PM₁₀	Pb
Moody AFB ¹ (tpy)	1,407.20	250	154.5	27.1	29.9	29.9
Camp Blanding ² (tpy)	4.6	1.4	3.9	0.3	0.4	0
Avon Park AFR ³ (tpy)	13,344.70	17.64	801.94	8.50	1,810.05	0
tpy: tons per year Sources: ¹ Air Force 2001a, all emissions ² Air Force 2000c, stationary sources, only ³ Air Force 2001c, all emissions						

3.8 BIOLOGICAL RESOURCES

3.8.1 Definition of Resource

Biological resources include living, native, or naturalized plant and animal species and the habitats within which they occur. These resources are divided into the categories of vegetation, wetlands, wildlife, and threatened, endangered, or state listed species of concern. Moody AFB, Camp Blanding, and Avon Park AFR, manage their natural resources in accordance with INRMPs.

3.8.2 Region of Influence

The ROI for biological resources under the proposed action are areas in the immediate vicinity of the proposed DZs, training areas, and construction on Moody AFB, Camp Blanding, and Avon Park AFR.

3.8.3 Affected Environment

3.8.3.1 Vegetation

Moody AFB

Moody AFB is located in southern Georgia within the outer coastal plain forest province of the U.S. lowland ecoregion (Bailey 1995). Upland areas consist of loblolly (*Pinus taeda*), longleaf (*Pinus palustris*), and slash pine (*Pinus elliottii*) overstory transitioning to blackgum (*Nyssa sylvatica*), bald cypress (*Taxodium distichum*) and pond cypress (*Taxodium ascendens*) in the low-lying wet areas. The understory consists mainly of gallberry (*Ilex* spp.), blueberry (*Vaccinium* spp.), wax myrtle (*Myrica cerifera*), greenbriar (*Smilax* spp.), and muscadine (*Vitis rotundifolia*). The areas in the vicinity of buildings 721 and 758 and around the airfield are previously disturbed and consist of paved roads, landscaped grasses and shrubs.

Camp Blanding

Camp Blanding consists of approximately 73,000 acres, of which 28,500 acres are covered by native vegetation. Vegetation communities at the installation include dry prairie, pineland, sand pine shrub, sandhill, xeric oak shrub, mixed hardwood-pine forests, freshwater swamp and marsh, wet prairie, grassland, and shrub and brushland (FArNG 1998). Cleared areas throughout Camp Blanding include various grasses and forbs such as broom sedge (*Carex scoparia*), goldenrod (*Oreochrysum* spp.), dogfennel (*Chamaemelum* spp.), and maiden cane (*Panicum hemitomon*). The Weinburg DZ itself is a cleared area with maintained grasses.

Avon Park AFR

Avon Park AFR covers approximately 106,000 acres, of which 98,300 are undeveloped. Natural plant communities present on Avon Park AFR include wet flatwoods, dry and wet prairies, floodplain marsh, scrub, seepage slopes, and tame grass pastures. Approximately 27,000 acres of land on Avon Park AFR are dominated by commercially viable pine species including north Florida slash pine (*Pinus elliottii* var. *elliottii*), longleaf pine, and south Florida slash pine (*Pinus elliottii* var. *densa*). The Hard Luck DZ is located at the runway on Avon Park AFR. The area within the DZ is characterized by maintained grasses with trees thirty feet tall located in the southeast and northeast corners.

3.8.3.2 Wetlands

Moody AFB

Wetlands make up about 5,500 acres of Moody AFB with most concentrated in the Grand Bay/Banks Lake ecosystem complex. The wetter areas usually consist of an overstory of blackgum and cypress transitioning to red maple (*Acer rubrum*) and sweetbay (*Magnolia virginiana*) towards the drier areas. The understory consists mainly of heaths (*Erica* spp.), red bay (*Persia borbonia*), wax myrtle (*Myricaceae* spp.), cinnamon fern (*Osmunda cinnamomea*), and greenbriar (*Smilax* spp.). Dense thickets

of evergreen shrubs and palmettos become more abundant as the hydric areas transition to drier conditions. There are approximately 35 acres of wetlands within the Easy and Airshow DZs. Figure 3.8-1 shows the area of Moody AFB covered by wetlands.

Camp Blanding

Wetlands at Camp Blanding include areas surrounding the naturally occurring sinkhole lakes and ponds and riparian water sources. About five percent of the installation is comprised of these lakes, ponds, and ephemeral ponds. The major riparian sources at Camp Blanding are the North Fork of Black Creek and Bull Creek, and the South Fork of Black Creek and Ates Creek (FArNG 1998). There are no wetlands on the Weinburg DZ, the closest wetland to the DZ boundary is 3,000 feet east. Figure 3.8-2 shows the area of Camp Blanding covered by wetlands.

Avon Park AFR

Wetlands make up approximately 52,462 acres of Avon Park AFR. Low lying wetlands and floodplains are associated with river and creek drainageways on Avon Park AFR including Kissimmee Marsh in the southeast along the Kissimmee River floodplain, Tick Island Marsh in the east, Deadins Pine Swamp in the northwest, the Morgan Hole Creek marsh-swamp complex between Arbuckle Creek and Morgan Hole Creek in the southwest, and Long Cypress off the west edge of the Bombing Range Ridge (Air Force 1996a). There are approximately 17 acres of wetlands within the Hard Luck DZ. Figure 3.8-3 shows the area of Avon Park AFR covered by wetlands.

3.8.3.3 Wildlife

Moody AFB

Most wildlife on Moody AFB are those animals usually found in pine flatwoods and wetland habitats. The Grand Bay/Banks area is the largest blackwater wetland in Georgia outside the Okefenokee Swamp and acts as an overwintering ground for a variety of waterfowl. Some common transient birds and waterfowl include: American wigeon (*Anas americana*), wood duck (*Aix sponsa*), American bittern (*Botaurus lentiginosus*), turkey vulture (*Cathartes aura*), Osprey (*Pandion haliaetus*), wild turkey (*Meleagris gallopavo*), and numerous species of songbirds.

Figure 3.8-1 Moody AFB Wetlands

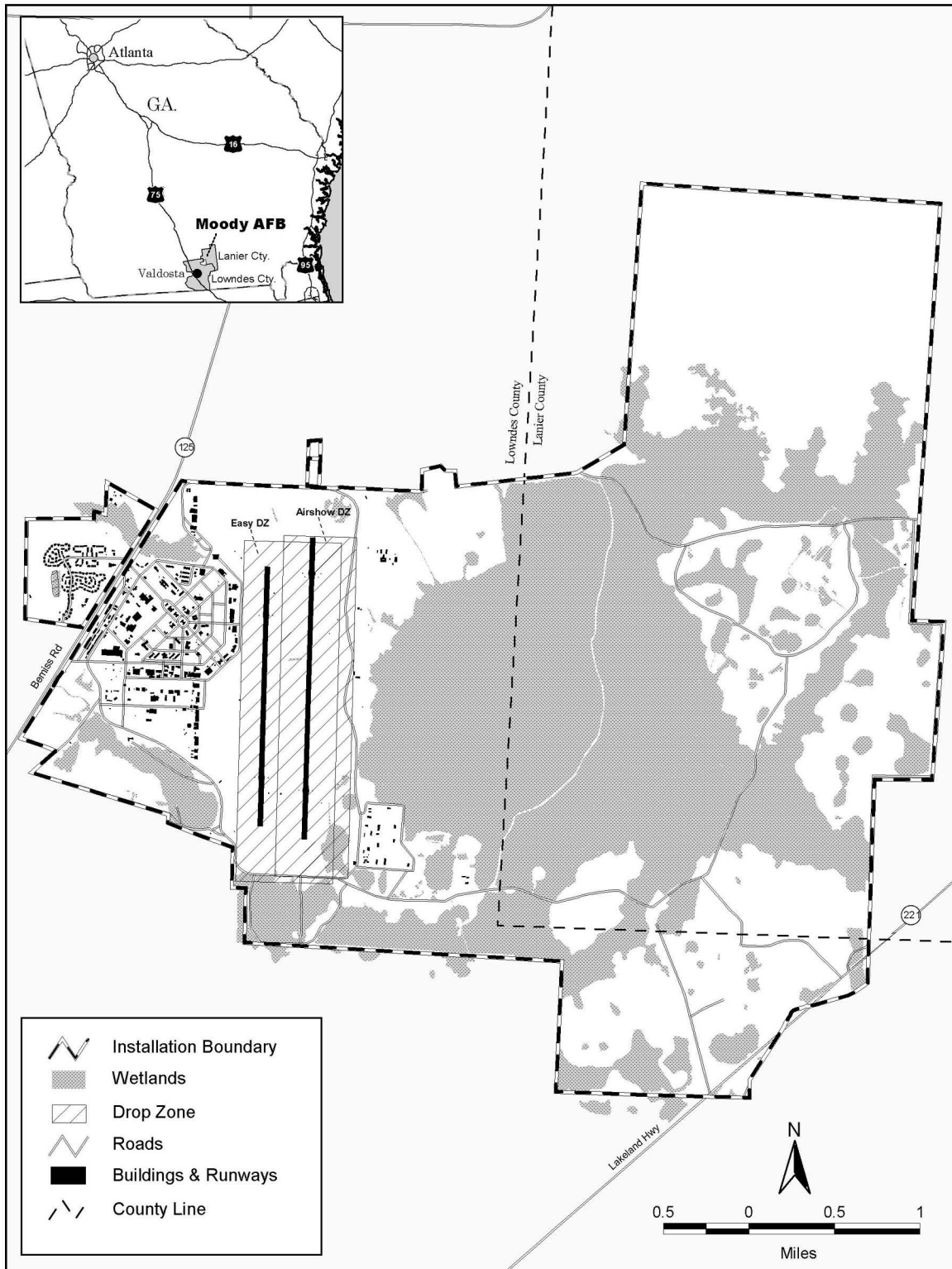


Figure 3.8-2 Camp Blanding Wetlands

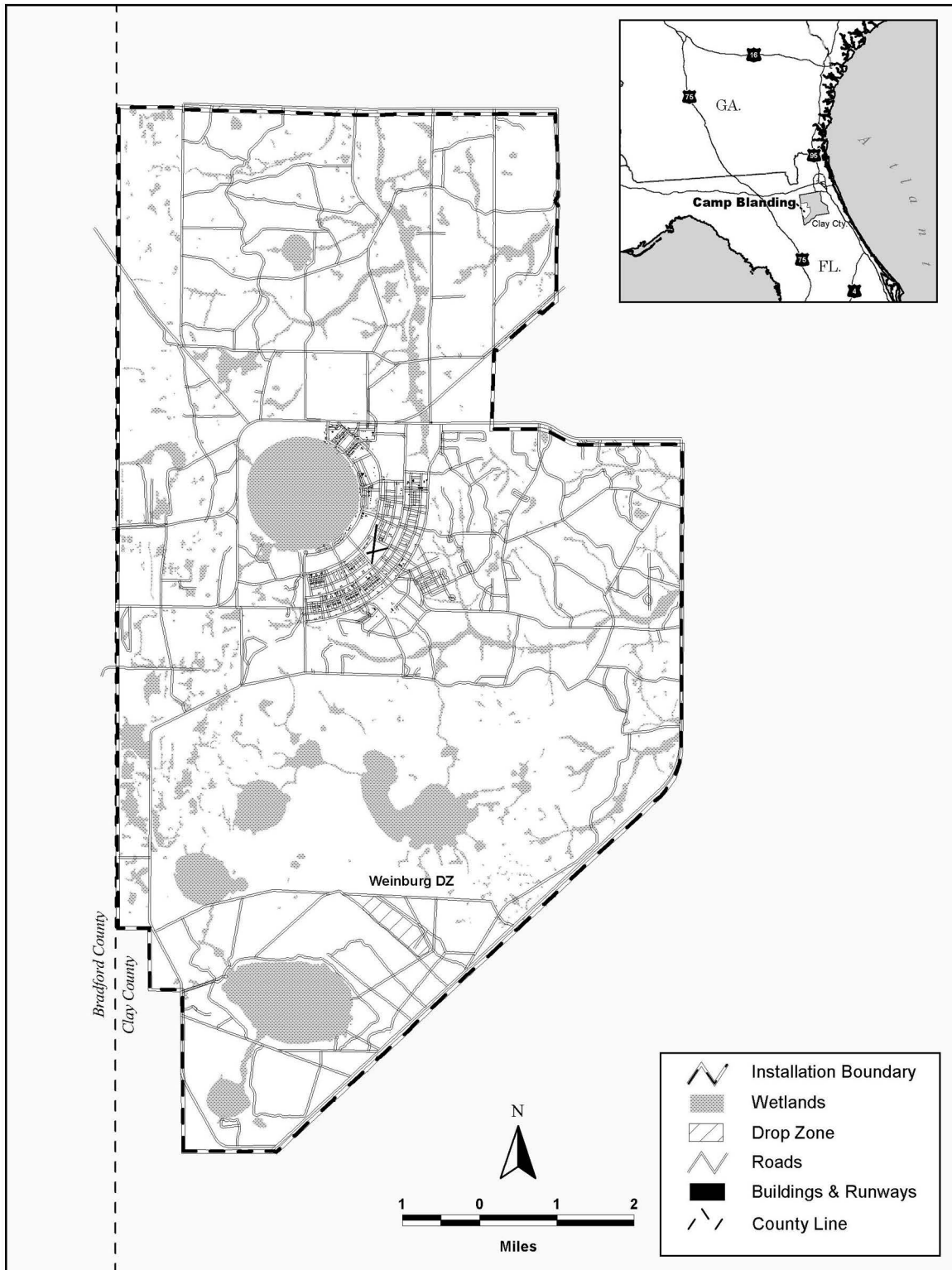
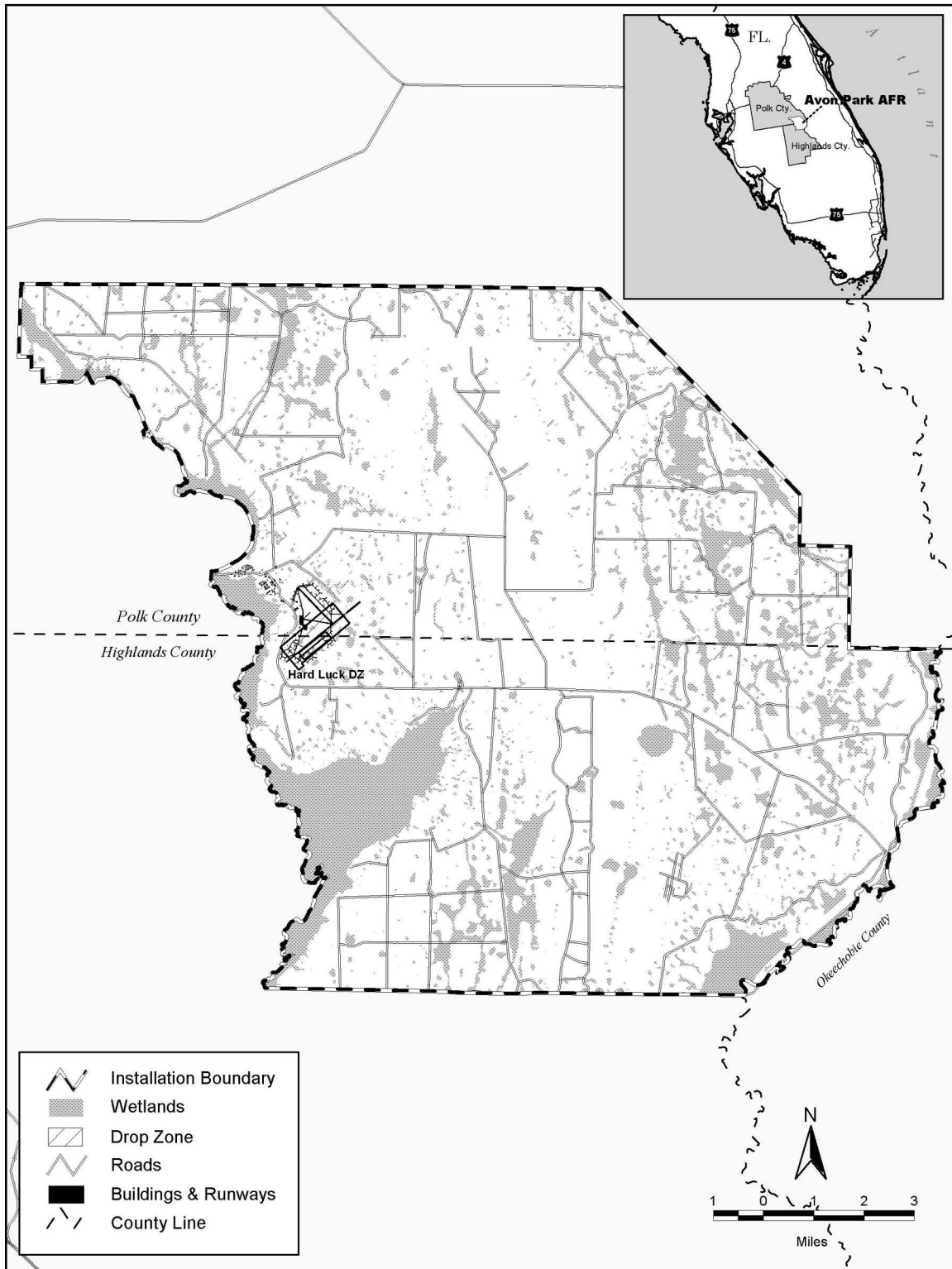


Figure 3.8-3 Avon Park AFR Wetlands



Some mammals that are common to Moody AFB include: Virginia opossum (*Didelphis virginiana*), eastern gray squirrel (*Sciurus carolinensis*), and white-tailed deer (*Odocoileus virginianus*). The wetlands provide habitat for such reptiles and amphibians as the tiger salamander (*Ambystoma tigrinum*), common box turtle (*Terrapene carolina*) and southern water snake (*Nerodia fasciata*).

Camp Blanding

Camp Blanding provides habitat for diverse wildlife species. Of the approximately 400 species that have the potential to occur on Camp Blanding, 250 have been recorded. Common species found on the installation include: southern toad (*Bufo terrestris*), Florida box turtle (*Terrapene carolina bauri*), eastern gray squirrel, and white-tailed deer. Some common bird species include: Mississippi Kite (*Ictinia mississippiensis*), American Robin (*Turdus migratorius*), Eastern Phoebe (*Sayornis phoebe*), and Swamp Sparrow (*Melospiza georgiana*) (FArNG 1998).

Avon Park AFR

Most wildlife on Avon Park AFR are those animals usually found in Florida flatwoods and wetland habitats. Harvestable populations of wildlife occur in central Florida or migrate through Avon Park AFR. Hunting is administered by the Environmental Flight in close cooperation with the Florida Fish and Wildlife Conservation Commission. Common game, songbird and waterfowl species on Avon Park AFR are: wild turkey, northern bobwhite (*Colinus virginianus*), mourning dove (*Zenaida macroura*), eastern bluebird (*Sialia sialis*), blue-winged teal (*Anas discors*), ring-necked duck (*Aythya collaris*), and mottled duck (*Anas fulvigula*). Some common mammals found on Avon Park AFR include: white-tailed deer, wild hog (*Sus scrofa*), Virginia opossum, eastern cottontail (*Sylvilagus floridanus*), and raccoon (*Procyon lotor*). The wetlands provide habitat for black bass (*Micropterus salmoides*), channel catfish (*Ictalurus punctatus*), and various species of reptiles and amphibians (Air Force 2000b).

3.8.3.4 Threatened and Endangered Species

Since the proposed locations for training are maintained grasses and runways, threatened and endangered plants are not known or expected to occur within these areas. Therefore, only threatened and endangered animal species are included in the analysis.

Moody AFB

Table 3.8-1 shows the state and Federally listed threatened and endangered species identified on Moody AFB as provided in the INRMP. The Red-cockaded woodpecker (*Picoides borealis*) is federally endangered and is known to occur in Lowndes County, however, no known nests occur on Moody AFB. The striped newt (*Notophthalmus perstriatus*), Florida gopher frog (*Rana areolata aesopus*), and the Carolina gopher frog (*Rana areolata capito*) are considered species of management concern with U.S. Fish and Wildlife Service in Lowndes County.

The Gopher tortoise (*Gopherus polyphemus*) is a state listed threatened species. The tortoise is also designated as a “keystone” species, meaning its presence is required for the continued existence of other species. On Moody AFB the tortoise burrows are associated with the Federally threatened Eastern indigo snake (*Drymarchon corais couperi*). Activities that occur in or near the burrows on Moody AFB are coordinated with U.S. Fish and Wildlife Service to ensure protection of the indigo snake.

Table 3.8-1 A List of the Threatened and Endangered Species that Occur on Moody AFB			
<i>Scientific Name Common Name</i>	<i>State Status</i>	<i>Federal Status</i>	<i>Habitat</i>
BIRDS			
<i>Haliaeetus leucocephalus</i> leucocephalus Southern Bald Eagle	E	T*	inland waterways and estuarine areas
<i>Mycteria americana</i> Wood Stork	E	E	feeds in fresh/brackish wetlands and nest in cypress or other wooded swamps
<i>Aimophila aestivalis</i> Bachman’s Sparrow	R	N/A	dry open pine or oak woods with a scattering of scrub; overgrown weedy fields and pastures
MAMMALS			
<i>Neofiber alleni</i> Round-tailed Muskrat	T	N/A	fresh-water bogs, swamps, lake margins, stream banks, and brackish waters of river deltas
REPTILES			
<i>Alligator mississippiensis</i> American Alligator	N/A	T	wet pine flatwoods, wet prairie, freshwater marsh, seepage swamp, pond swamp, and mangroves
<i>Macrolemys temminckii</i> Alligator Snapping Turtle	T	N/A	wet pine flatwoods, wet prairie, freshwater marsh, seepage swamp, pond swamp, and mangroves
<i>Drymarchon corais couperi</i> Eastern Indigo Snake	T	T	winter- den in dry sandridge habitat summer-feed in creek bottoms, upland forests, and agricultural fields
<i>Gopherus polyphemus</i> Gopher Tortoise	T	N/A	well-drained , sandy soils in forest and grassy areas; associated with pine overstory, and open understory with some groundcover
Source: Air Force 2001b * The bald eagle is proposed for de-listing. S = Species of Concern E = Endangered T = Threatened R = Rare			

Camp Blanding

The INRMP for Camp Blanding divides the installation into management units. The Weinburg DZ is within training area T8. Table 3.8-2 shows state and Federally listed threatened and endangered species

located within T8. No threatened or endangered species or species of special concern are in the immediate vicinity of the Weinburg DZ or within its boundaries.

Table 3.8-2 A List of the Threatened and Endangered Species that Occur in the T8 Management Unit at Camp Blanding			
<i>Scientific Name</i> <i>Common Name</i>	<i>State Status</i>	<i>Federal Status</i>	<i>Habitat</i>
REPTILES & AMPHIBIANS			
<i>Drymarchon corais couperi</i> Eastern indigo snake	T	T	winter- den in dry sandridge habitat summer-feed in creek bottoms, upland forests, and agricultural fields
<i>Rana capito</i> Gopher Frog	S	N/A	Xeric, upland habitats that include longleaf pine – turkey oak associations. Breed in ephemeral ponds not supportive of predacious fish.
Source: FArNG 2000 E = Endangered T = Threatened S = Species of Concern			

Avon Park AFR

Table 3.8-3 shows the state and federally listed threatened and endangered species found on Avon Park AFR. Florida Grasshopper sparrow nests are located near the northeastern edge of the Hard Luck DZ. Management procedures are in place to reduce the risk of impacting this species. No threatened or endangered plant species are known to occur within the Hard Luck DZ.

Table 3.8-3 A List of the Threatened and Endangered Species that Occur on Avon Park AFR			
Scientific Name Common Name	State Status	Federal Status	Habitat
BIRDS			
<i>Ajaia ajaja</i> Roseate Spoonbill	S	NA	mangrove marshes
<i>Ammodramus savannarum floridanus</i> Florida Grasshopper Sparrow	E	E	dry and wet prairie
<i>Aphelocoma coerulescens</i> Florida Scrub Jay	T	T	Scrub and scrubby flatwoods
<i>Athene cunicularia floridana</i> Florida Burrowing Owl	S	NA	dry prairie habitats
<i>Falco Sparverius paulus</i> Southeastern American Kestrel	T	NA	hydric pine flatwoods, freshwater marsh, and pond swamp
<i>Grus Canadensis pratensis</i> Florida Sandhill Crane	T	NA	prairies, freshwater marshes, and pasture land
<i>Haliaeetus leucocephalus</i> Bald Eagle	T	T*	inland waterways and estuarine areas
<i>Mycteria Americana</i> Wood Stork	E	E	feeds in fresh/brackish wetlands and nest in cypress or other wooded swamps
<i>Pandion haliaetus</i> Osprey	S	NA	along lakes, rivers, and coasts,
<i>Picoides borealis</i> Red-cockaded Woodpecker	T	E	nest in mature pine w/ low understory vegetation, forage in pine and pine/hardwood stands > 30years old
<i>Polyborus plancus</i> Crested Caracara	T	T	mesic temperate hammock, mesic and hydric pine flatwoods, and dry and wet prairie
<i>Rostrhamus sociabilis</i> Snail Kite	E	E	hydric pine flatwoods, freshwater marsh, and pond swamp
<i>Sterna antillarum</i> Least Tern	T	NA	coast
MAMMALS			
<i>Felis concolor coryi</i> Florida panther	E	E	swamps, scrub, dry and wet prairie, scrubby flatwoods, pine woods, tropical hardwood hammock, mesic temperate hammock, and maritime hammock
<i>Podomys floridanus</i> Florida mouse	S	NA	scrub
<i>Sciurus niger Sherman</i> Sherman's fox squirrel	S	NA	mixed forests and swamps
<i>Ursus americanus floridans</i> Florida black bear	T	NA	forest and forested wetlands

Table 3.8-3 A List of the Threatened and Endangered Species that Occur on Avon Park AFR (cont'd.)			
<i>Scientific Name</i> <i>Common Name</i>	<i>State Status</i>	<i>Federal Status</i>	<i>Habitat</i>
REPTILES AND AMPHIBIANS			
<i>Drymarchon couperi</i> Eastern indigo snake	T	T	winter- den in dry sandridge habitat summer-feed in creek bottoms, upland forests, and agricultural fields
<i>Gopherus polyphemus</i> Gopher tortoise	S	NA	well-drained , sandy soils in forest and grassy areas; associated with pine overstory, and open understory with some groundcover
<i>Pituophis melanoleucus mugitus</i> Florida pine snake	S	NA	sandy areas of longleaf pine (Pinus palustris) and/or turkey oak (Quercus laevis)
<i>Rana areolata</i> gopher frog	S	NA	sandy areas of pine forest and wetlands
<i>Neoseps reynoldsi</i> sand skink	T	T	high pine and scrub
<i>Alligator mississippiensis</i> American alligator	S	T	wet pine flatwoods, wet prairie, freshwater marsh, seepage swamp, pond swamp, and mangroves
<i>Eumeces egregius lividus</i> Blue-tailed mole skink	T	T	high pine and scrub
Source: Air Force 2002b * The bald eagle is proposed for delisting. E = Endangered T = Threatened S = Species of Concern			

3.9 CULTURAL RESOURCES

3.9.1 Definition of Resource

Cultural resources consist of prehistoric and historic districts, sites, structures, artifacts, or any other physical evidence of human activities considered important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. Cultural resources can be divided into three major categories: archaeological resources (prehistoric and historic), architectural resources, and traditional cultural resources. Archaeological resources are locations and objects from past human activities. Architectural resources are those standing structures that are usually over 50 years of age and are of significant historic or aesthetic importance. Traditional cultural resources hold importance or significance to Native Americans or other ethnic groups in the persistence of traditional culture.

The significance of such resources relative to the Native American Graves Protection and Repatriation Act and/or eligibility for inclusion in the National Register of Historic Places (NRHP) is considered a part of the EA process. The regulations and procedures in 36 CFR 800, which implements Section 106 of the National Historic Preservation Act, requires federal agencies to consider the effects on properties listed in, or eligible for inclusion in the NRHP. Prior to approval of the proposed action, Section 106 requires that the Advisory Council on Historic Preservation be afforded the opportunity to comment.

3.9.2 Region of Influence

The ROI for cultural resources are those areas where construction and training are proposed on Moody AFB, Camp Blanding, and Avon Park AFR.

3.9.3 Affected Environment

3.9.3.1 Archaeological Resources

Moody AFB

A Cultural Resource Management Plan (CRMP) for Moody AFB was completed in 1997 (Air Force 1997c). The plan indicates that the entire base, including Grand Bay Range, has been surveyed for archaeological resources. Shovel testing was conducted in all areas except areas of prior disturbance, impassable standing water, and areas that lacked safe access to surveyors. Twenty archaeological sites, including 10 prehistoric, two historic, and eight multi-component sites were recorded at Moody AFB during a 1996 survey (Air Force 1996c). An additional five sites are known to occur on the base (Thackston 2003). Forty-one isolated finds have also been identified (32 prehistoric, four historic, three multi-component, and two unknown). Isolated finds are defined as single occurrences of artifacts that cannot be definitively associated with a defined site of human occupation. Five of the archaeological sites and none of the isolated finds have been identified as potentially eligible for listing in the NRHP and are currently protected through avoidance. One of these archeological sites (Site 9LW71) eligible for listing in the NRHP exists within a wooded area of the ROI.

Camp Blanding

An Integrated Cultural Resources Management Plan (ICRMP) for the FArNG, including Camp Blanding (FArNG 2002), identifies 32 sites recorded at Camp Blanding (13 prehistoric, 18 historic, and one multi-component) of which one is considered potentially eligible for listing in the NRHP. Three sites, including a historic cemetery, a turpentine still, and a lithic scatter are classified as “not determined” in terms of eligibility for listing in the NRHP. All other sites recorded at Camp Blanding have been determined not eligible. According to the ICRMP, one site (8CL639) recommended eligible at Camp Blanding consists of six earthen ridges identified during a 1994 survey conducted prior to construction of structures to stage

the Titan IV solid rocket motors. The site is located south of Kingsley Lake between the Cantonment Area and the Impact Area.

Avon Park AFR

Previous archaeological surveys at Avon Park AFR have recorded a total of 141 archaeological sites; approximately 30 percent of the installation has been surveyed (Air Force 2003b). Of this total, 36 sites have been found eligible for listing in the NRHP. A survey of approximately three percent of Avon Park conducted in 1985 identified 37 archaeological sites, ten of which were recommended potentially eligible for listing in the NRHP. In 1995/96, a Phase I cultural resources inventory was conducted of 6,800 noncontiguous acres resulting in the identification of 11 archaeological sites (five prehistoric and six historic). One prehistoric site and one historic site were recommended as eligible for the NRHP (Air Force 1997b).

3.9.3.2 Historic Architectural Resources

Moody AFB

An architectural survey of the installation identified fifteen structures meeting the minimum age of 50 years required for inclusion in the NRHP (Air Force 1997c). The resources included five buildings, three hangars, two ammunition storehouses, a utility vault, two heating facilities, and a water tower (Air Force 1996b). None of these resources was recommended as NRHP-eligible. However, a historic buildings survey conducted in 1999 recommended the water tower (Building 618) as eligible for listing in the NRHP (U.S. Army Corps of Engineers 1999). In 1995, Cold War era assessment was conducted on 137 structures at Moody AFB (Mariah Associates Inc. 1995). The survey concluded that no buildings or structures at the installation meet any of the criteria established for Cold War era resources necessary for inclusion in the NRHP.

Camp Blanding

All structures aged 50 years or older at Camp Blanding, and any structures relating to the Cold War era, have been evaluated for inclusion in the NRHP (Southeastern Archaeological Research, Inc. [SEARCH] 2003). The results of this evaluation are currently under review by the Florida State Historic Preservation Office; however, SEARCH has recommended that portions of the cantonment area are eligible for inclusion in the NRHP (SEARCH 2003). In addition, SEARCH has identified the existence and potential significance of World War II era ranges at Camp Blanding, however many of these ranges have yet to be located or evaluated due to dense overgrowth.

Avon Park AFR

Construction of the original Avon Park Bombing Range began during World War II. In 1950, the facility was deactivated and most of the structures were torn down. All remaining historic buildings were evaluated for historic architectural significance. In total, 25 historic structures dating to World War II, are

considered eligible for the NRHP (Air Force 1997b, Air Force 2003b). Seven of the historic buildings are within the cantonment area. Avon Park was reactivated in 1955 as a training facility during the Cold War. Cold War-era resources, including abandoned Cold War bombing ranges, were evaluated in 1996 and recommended as ineligible for NRHP (Air Force 2003b).

3.9.3.3 *Traditional Cultural Properties*

No Traditional Cultural Properties have been identified at Moody AFB, Camp Blanding or Avon Park AFR.

3.10 LAND USE AND TRANSPORTATION

3.10.1 Definition of Resource

Land use refers to the classification of land according to the activities that may take place in a particular area, the manipulation of land for the purpose of human use, and the use of land for the protection of natural resources. Transportation resources include the infrastructure and equipment required for the movement of people, raw materials, and manufactured goods.

3.10.2 Region of Influence

The ROI for land use and transportation includes Moody AFB, Camp Blanding, and Avon Park AFR, as well as the roadways between the three installations.

3.10.3 Affected Environment

Moody AFB

Moody AFB is located in Lowndes and Lanier Counties, approximately 10 miles northeast of Valdosta, GA. Moody AFB connects to Interstate (I) 75, which runs through Valdosta, by four-lane State Highway (HW) 125 (Figure 1.2-2). Three gates allow access to the AFB (Main, North, and South), and all connect to State Highway 125. Convoys between Moody AFB and Camp Blanding and also Moody AFB and Avon Park AFR, along existing state and U.S. highways, will be required to transport personnel and equipment to and from trainings.

Land uses on Moody AFB include aircraft operations and infrastructure, residential/community, industrial, administrative, and recreational uses. Undeveloped wetlands, agricultural fields, small residential and commercial lands surround the base.

Camp Blanding

Camp Blanding is a 73,000 acre state owned and operated training facility. Located in Clay County, FL, Camp Blanding is about 45 miles southwest of Jacksonville, FL. Transportation routes likely to be used to convoy equipment and personnel between Moody AFB and Camp Blanding include HW 125/31, I-75, I-90, HW 100 and HW 16 (Figure 3.10-1).

Aside from combat training, Camp Blanding has several areas for recreational, administrative, and residential uses. The land surrounding Camp Blanding is mainly used for agricultural, forestry, preservation, residential, commercial, and industrial purposes.

Avon Park AFR

Avon Park AFR is located in Polk and Highlands Counties and is approximately 10 miles east of Avon Park, FL. All population centers in the near-vicinity of Avon Park AFR have less than 10,000 people. Transportation routes likely to be used to convoy equipment and personnel between Moody AFB and Avon Park AFR include HW 125/31, I-75, HW-27, and HW 64 (Figure 3.10-2). While on Avon Park AFR, travel is only permitted on existing roads.

Avon Park AFR is a 106,000 acre bombing and gunnery range with approximately eighty-five percent of the area leased for cattle grazing. Approximately 27,000 acres are considered dominated by commercially valuable pine species. The main land use types surrounding the bombing/gunnery range are similar to those on Avon Park AFR and include agriculture (mainly cattle grazing), forestry, and recreation.

Figure 3.10-1 Convoy Routes between Moody AFB and Camp Blanding

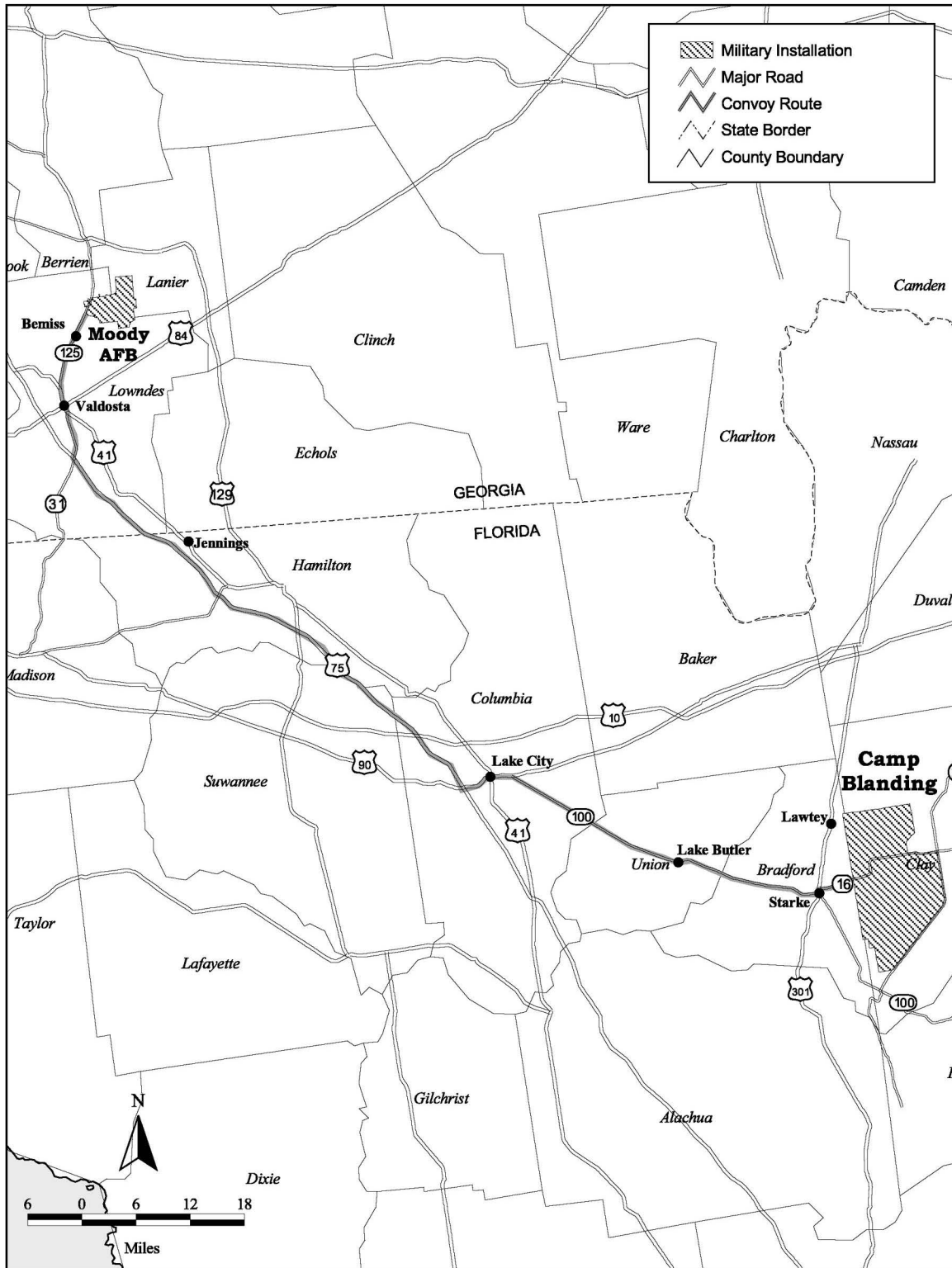
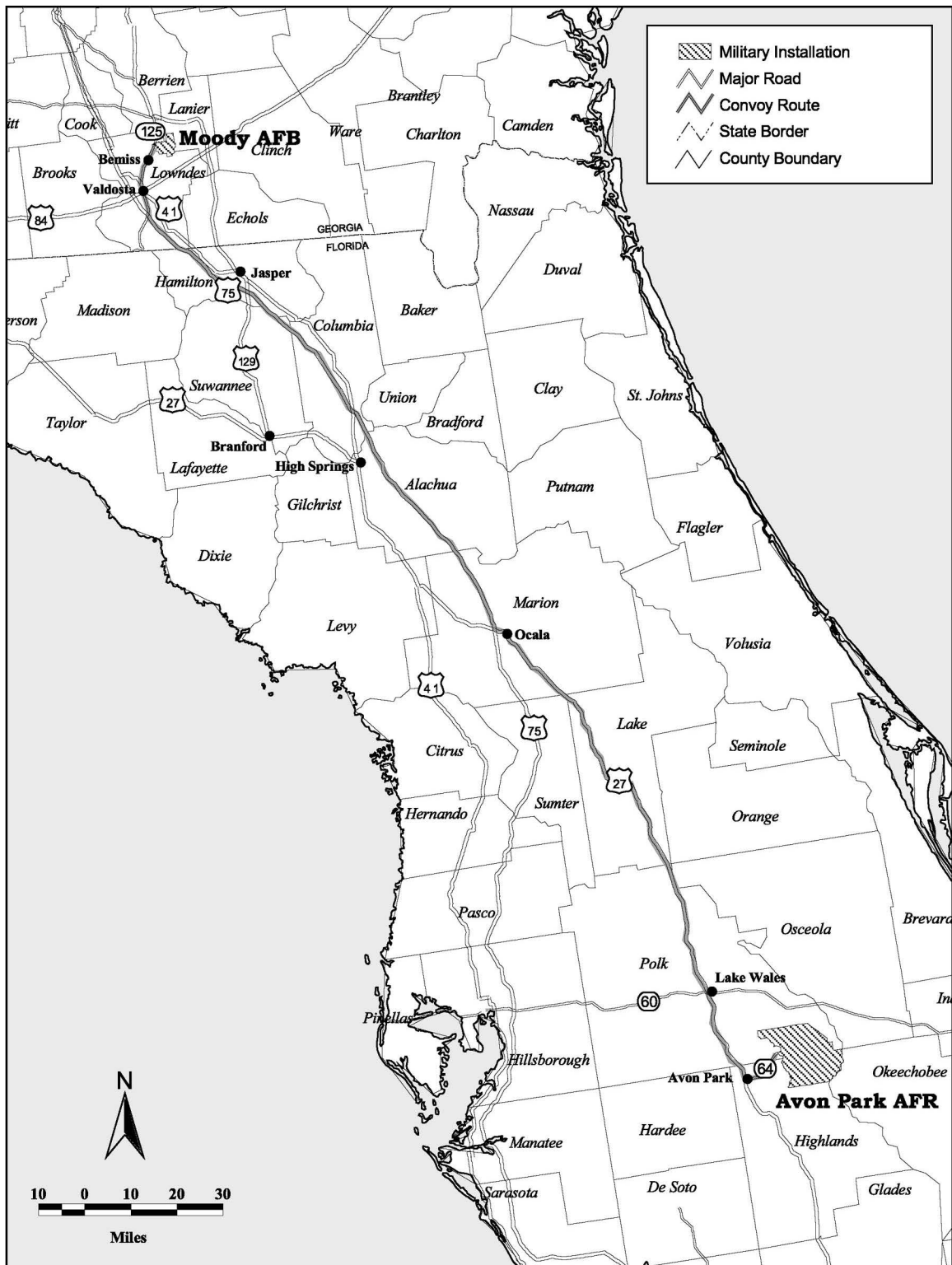


Figure 3.10-2 Convoy Routes between Moody AFB and Avon Park AFR



3.11 VISUAL AND RECREATIONAL RESOURCES

3.11.1 Definition of Resource

Visual resources refers to any natural or human-made landmarks that make up the aesthetics of an area, including but not limited to landforms, water surfaces, vegetation, buildings, bridges, and roads.

Recreational resources refer to those activities, settings, or other elements that involve natural or manufactured facilities used by the public for recreation.

3.11.2 Region of Influence

The ROI for visual and recreational resources includes the proposed DZs and training areas of Moody AFB, Camp Blanding, and Avon Park AFR, as well as the viewsheds of these areas.

3.11.3 Affected Environment

Moody AFB

Moody AFB has a landscape typical of a rural area. The area is characterized by flat to sloping plateaus and is free of significant topographical features. The majority of developed land on Moody AFB is located in the northwestern portion of the base. Common aesthetics of the base include runways, aircraft hangers, antennae, lights, and towers. Most of the undeveloped land on the installation occur as wetlands, forested areas (including areas of natural regeneration as well as pine plantations), fields, and open water. Several recreational facilities are present and include playing fields for a variety of sports, picnic areas, and a golf course. Grand Bay Wildlife Management Area is located on the base and is co-managed by Moody AFB and the Georgia Department of Natural Resources. It is here that a number of outdoor activities exist such as hunting, fishing, boating, camping, biking, and watching wildlife.

Camp Blanding

Camp Blanding is situated in one of Florida's fastest growing counties (Clay County). The topography is generally level and gently sloping. Eighty percent of the base's land consists of pine and oak forests. Camp Blanding is made up of the 2,725 acre Cantonment Area, numerous weapons ranges, 51,500 acres for maneuver training, aviation facilities, and an almost 15,000 acre impact area. Located on the shores of Kingsley Lake, several outdoor activities abound on the shores of Camp Blanding, including water-skiing, fishing, boating, and jet skiing. Inland, the installation also offers hunting, picnicking, and wildlife watching opportunities.

Avon Park AFR

Avon Park AFR is in a rural setting. Only 3,000 acres have been developed for base facilities, which include operations and maintenance facilities for training, aircraft parking ramp, vehicle support, and storage facilities. Wet flatwoods, dry and wet prairies, floodplain marsh, scrub, pine fields, and grass pastures dominate the landscape. The topography of Avon Park AFR varies. It includes flat areas, gentle slopes ranging from 45-75 ft. above MSL and the bombing range ridge, which runs north to south in the center of the base and ranges from 125 to 150 ft. above MSL (Air Force 2000b). Over three-quarters of the Avon Park AFR acreage is available, on a regular basis, to the public for recreational uses such as hunting, camping, fishing, hiking, and wildlife viewing.

3.12 SOCIOECONOMICS

3.12.1 Definition of Resource

This socioeconomic analysis includes investigations of the population of the area of interest. Employment and income are not expected to be impacted by the proposed action; therefore, the socioeconomic analysis will focus on population within the ROI.

3.12.2 Region of Influence

The ROI for the proposed action includes Lanier and Lowndes counties in Georgia. Camp Blanding and Avon Park AFR would be used by the CRG for training only on a temporary duty basis, all personnel would be billeted on base, therefore, no socioeconomic impacts would occur.

3.12.3 Affected Environment

The population of Moody AFB and the Moody AFB ROI are 5,068 and 99,356 respectively.

3.13 ENVIRONMENTAL JUSTICE

3.13.1 Definition of Resource

EO 12898 (*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, February 1994) requires a federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high human health or environmental effects of its programs, policies, and activities on minority populations and low income populations.” A memorandum from President Clinton concerning EO 12898 stated that federal agencies should collect and analyze information concerning a project’s effects on minorities or low-income groups,

when required by NEPA. If such investigations find that minority or low-income groups experience a disproportionate adverse effect, then avoidance or mitigation measures are to be taken.

A minority population can be defined by race, by ethnicity, or by a combination of the two classifications. According to the CEQ (1997), a minority population can be described as being composed of the following population groups: American Indian or Alaskan Native, Asian or Pacific Islander, Black, not of Hispanic origin, or Hispanic, and exceeding 50 percent of the population in an area or the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population.

The U.S. Census Bureau (USCB) defines ethnicity as either being of Hispanic origin or not being of Hispanic origin. Hispanic origin is defined as “a person of Cuban, Mexican, Puerto Rican, South or Central America, or other Spanish culture or origin regardless of race” (USCB 2001). Each year the USCB defines the national poverty thresholds, which are measured in terms of household income dependent upon the number of persons within the household. Individuals falling below the poverty threshold (\$12,674 for a household of four in 1990) are considered low-income individuals. USCB census tracts where at least 20 percent of the residents are considered poor are known as *poverty areas* (USCB 1995). When the percentage of residents considered poor is greater than 40 percent, the census tract becomes an *extreme poverty area*.

3.13.2 Region of Influence

The ROI for the proposed action is limited to the area surrounding Moody AFB, including Lanier and Lowndes Counties, Georgia. Training at Camp Blanding and Avon Park AFR would be limited to the installation, therefore no impact to low-income or minority populations is anticipated.

3.13.3 Affected Environment

Neither Lanier or Lowndes Counties are considered areas of concentrated minority population and none of the locales would be considered a poverty area (Tables 3.13-1, 3.13-2).

Table 3.13-1 Demographic Profiles of the Moody AFB				
	<i>Moody AFB ROI</i>			
	<i>Lanier County</i>		<i>Lowndes County</i>	
	Number of People	% of Population	Number of People	% of Population
White, Non-Hispanic	5100	70.4	55901	60.7
African American, Black	1837	25.4	31681	34.4
American Indian, Alaska Native	8.0	1.1	287	0.3
Asian	6	0.1	852	0.9
All other races, combination of races	218	3.0	3394	3.7
Hispanic	186	2.6	2567	2.8
Total Minority Population	2141	29.6	36214	39.3
Total Population	7241	100.0	92115	100.0

Table 3.13-2 Income Levels for Households and Per Capita Income for the Moody AFB ROI for 2000		
	<i>Lanier County</i>	<i>Lowndes County</i>
Median Household Income	\$29,171	\$32,132
Per Capita Income	\$13,690	\$14,460

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4.0 ENVIRONMENTAL CONSEQUENCES

Potential environmental impacts are determined by first understanding the existing conditions in the affected area. The impact analysis process involves evaluating the condition of the existing environment (Chapter 3.0) and using the details of the proposed action and alternatives (Chapter 2.0) to assess potential impacts. This chapter presents the methods of analysis applied in this EA to determine the potential impacts to various resource and topic areas. The environmental impact analysis process is designed to focus analysis only on these environmental resources that could potentially be affected. Each alternative is analyzed as well as the No Action Alternative. For this analysis, a worst case scenario (all training occurring at one location) has been analyzed. Since both training locations may be used, the actual impacts to each location are expected to be less than those presented here in which only one location is used.

4.1 AIRSPACE MANAGEMENT

An impact to airspace management could occur if the proposed action or alternative: 1) restricts movement of air traffic in the area, 2) conflicts with ATC in the region, 3) changes operations within airspace already designated for other purposes, 4) results in a need to designate controlled airspace where none previously existed, 5) results in a reclassification of controlled airspace from a less restrictive to a more restrictive classification, or 6) results in a need to designate regulatory special use airspace.

4.1.1 Alternative A

Under Alternative A, increasing the airspace use at Moody AFB and Camp Blanding could potentially impact airspace scheduling. Under Alternative A, the CRG proposes to use 192 hours of airfield time annually at Moody AFB for parachute proficiency and equipment drop training. The increase in sorties performed by the CRG (0.19%) (Table 2.1-4, page 2-7) could result in a decrease in the number of sorties performed by other units at Moody AFB. The limited airfield availability could potentially negatively impact airspace training for other units at Moody AFB. The CRG would coordinate their use with Moody AFB ATC to minimize scheduling conflicts.

Some parachute proficiency training, equipment drops, Quarterly, and Annual training would be conducted at Camp Blanding. Prior to training activities, the CRG would coordinate with Moody AFB ATC, and Camp Blanding Range Control personnel accordingly. However, it is not expected that the proposed increase in sorties (2.5%) at Camp Blanding would result in impacts to airspace management (Table 2.1-4, page 2-7). This increase (2.5%) represents a worst case scenario of all equipment drops, quarterly and annual training, and one parachute proficiency mission being conducted at Camp Blanding. It is anticipated that airspace impacts would be less than this, since equipment drops would be scheduled

based on availability of Moody AFB or Camp Blanding. Since use of airspace could restrict ground training, coordination would help ensure that conflicts would not occur. With proper coordination, no significant impacts to airspace management at Moody AFB or Camp Blanding would occur.

4.1.2 Alternative B

Under Alternative B, parachute proficiency training and equipment drops would occur at Moody AFB and Camp Blanding as in Alternative A. The potential impacts to Moody AFB airfield would be the same as Alternative B. Conducting only equipment drops and the associated parachute proficiency mission at Camp Blanding is not expected to impact airspace management since the proposed increase in sorties is 2.1% (Table 2.1-4, page 2-7). The CRG would coordinate airspace use with the Moody AFB ATC and Camp Blanding Range Control to minimize scheduling concerns and potential impacts to airspace management. The quarterly and annual training would be conducted at Avon Park AFR. The CRG would coordinate these activities with Avon Park Range Control to avoid any conflicts with other users of the ranges. Under Alternative B, sorties at Avon Park AFR are expected to increase by 1.0% (Table 2.1-4, page 2-7). No significant impacts to airspace management at Avon Park AFR are expected with the implementation of Alternative B

4.1.3 Alternative C

Under the No Action Alternative the conversion of the SFG would not occur. Baseline conditions would remain unchanged. As a result no change to airspace would take place.

4.2 SAFETY

Based on the definition of resource, impacts to safety could occur if the proposed action added a new type of training hazard, added a significant number of existing training events, or added a large number of personnel.

4.2.1 Alternative A

Implementation of Alternative A would result in the addition of parachute proficiency and equipment drop training at the Moody AFB Easy and/or Airshow DZs. Based on available information, equipment drop training does not currently take place at these DZs. Therefore, an increased safety risk associated with the monthly equipment drop is expected at Moody AFB. Potential risks associated with parachute jumps include broken bones upon landing and collision with obstacles (trees, fences, power lines, etc.). To ensure safety to personnel, the airfield is closed to all users during parachute and equipment drop training.

The proposed monthly equipment drops and quarterly and annual trainings at Camp Blanding would be conducted in accordance with existing SOPs. The proposed training would result in a minor increase of 0.72% in average number of personnel who utilize Camp Blanding per day (Table 2.1-4, page 2-7). No significant impacts are expected at Moody AFB or Camp Blanding with the implementation of Alternative A.

4.2.2 Alternative B

Implementation of Alternative B, would result in the same impacts to safety at Moody AFB as Alternative A. Impacts to safety at Camp Blanding are expected to be minimal. The proposed equipment drop training represents a 0.29% increase in the average number of personnel who use Camp Blanding daily (Table 2.1-4, page 2-7). The types of training proposed already occur on Camp Blanding and SOPs are in place. At Avon Park AFR, the proposed training does not represent a significant increase in the usage of training areas (1.4%), a significant increase in the number of training operations, or a training activity that is not currently taking place on Avon Park AFR (Table 2.1-4, page 2-7). No significant impacts are expected at any of the proposed locations as a result of implementing Alternative B.

4.2.3 Alternative C

Under the No Action Alternative, the conversion of the SFG would not occur. Baseline conditions at all locations would remain unchanged. If the SFG does not become a CRG, the SFG, Airborne RED HORSE, and STG would not train together prior to deployment into hostile locations. This would decrease their efficiency as a cohesive unit and could impact the safety of these and other units.

4.3 NOISE

This section addresses the potential impacts from noise as a result of the proposed conversion of the SFG to a CRG. Elements of the proposed action and alternatives that would result in the generation of noise have been evaluated to the degree in which they would affect the ROI.

4.3.1 Alternative A

Under Alternative A, parachute proficiency training and equipment drops would be conducted at the Easy and Airshow DZs on Moody AFB or Weinburg DZ at Camp Blanding. The proposed training is expected to increase the number of annual aircraft LTOs and TGOs at Moody AFB by 154 and 264 respectively (Table 2.1-3, page 2-6). At Moody AFB, this represents an increase of 0.19% sorties based on existing average sorties per day (Table 2.1-4, page 2-7). As a result of the small increase in sorties, changes to the noise environment are expected to be negligible. Day-night average sound levels are expected to remain

within existing noise contours. At Camp Blanding the small increase in sorties (2.5%) (Table 2.1-4, page 2-7) would result in an imperceptible increase from baseline conditions.

Proposed training at Camp Blanding includes aircraft passes and weapons/artillery firing. This is an ongoing source of noise at the installation. Under this alternative sorties are expected to increase by 2.5% (Table 2.1-3, page 2-6). Additionally, the proposed action would represent an increase in approximately 0.48% in munitions use above what the SFG currently uses at Camp Blanding (Table 2.1-4, page 2-7). Consequently, any potential noise increase due to quarterly and annual training activities is expected to be negligible.

Noise related to the renovation of buildings 721 and 758 is expected to be temporary and minor. Due to their proximity to the airfield, any noise created during the temporary period of renovation activities is not expected to change the baseline noise conditions.

4.3.2 Alternative B

Under Alternative B, quarterly and annual training would occur at Avon Park AFR instead of Camp Blanding. Implementation of this alternative is expected to have the same results at Moody AFB as Alternative A. Under this alternative, monthly equipment drops and possibly one mission of parachute proficiency would occur at Camp Blanding. Sorties in support of this training represent a 2.1% increase over baseline (Table 2.1-4, page 2-7). Therefore, the noise environment at Camp Blanding is not expected to be measurably affected.

Like Camp Blanding, Avon Park AFR generates noise due to weapons firing and detonations on a continuing basis. Noise from these activities will continue to be the dominant noise source. The addition of quarterly and annual training activities represents only a small increase compared to existing conditions (1.0% increase in sorties, 0.13% increase in munitions use) (Table 2.1-4, page 2-7). As such, any minor noise increase is expected to be negligible, as in Alternative A.

4.3.3 Alternative C

Under the No Action Alternative the conversion of the SFG to a CRG would not occur. The increase in flight operations and the renovations of buildings 721 and 758 would not take place at Moody AFB and no increases in training activities would occur at Camp Blanding or Avon Park AFR. As a result, there would be no change to the baseline noise conditions.

4.4 HAZARDOUS MATERIALS AND WASTE MANAGEMENT

The analysis of hazardous materials and waste management focuses on how and to what degree the alternatives affect hazardous materials use and management, hazardous waste generation and management, and waste disposal. A substantial increase in the quantity or toxicity of hazardous substances used or generated would be considered a potentially significant impact.

4.4.1 Alternative A

Implementation of Alternative A is not expected to have any appreciable impacts on hazardous materials and waste at Moody AFB or Camp Blanding. Proposed pyrotechnic devices (ground burst simulators and smoke canisters) and blank rounds of ammunition are already in use at the proposed locations for training and procedures are in place for cleanup and disposal. The proposed increase in use represents a 0.48% increase over current munitions use at Camp Blanding (Table 2.1-4, page 2-7). Every effort would be made to collect and properly dispose of all spent canisters and brass used in the training according to the Camp Blanding HWMP. Equipment drops and quarterly and annual training will result in an increased risk of spills from equipment dropped or brought to Camp Blanding. Any hazardous materials or waste generated by the proposed action would be handled in accordance with the HWMP.

There would be an increase in the amount of flammable products, petroleum, and oils from the proposed equipment storage and maintenance increase at Moody AFB. Renovation of buildings 721 and 758 at Moody AFB would also cause a temporary increase in use and storage of a variety of hazardous materials and waste including paint products. The static free floor coating is composed of a chemical-resistant urethane. Included in the process of applying the coating is use of aluminum oxide, epoxy, and polyurethane. Moody AFB regulations require a trained technician from the coating manufacturer to be on the work site at all times during installation to ensure proper procedures are followed. No significant impacts are expected with the implementation of Alternative A.

4.4.2 Alternative B

Under Alternative B, impacts to hazardous materials and waste generation handling and disposal at Moody AFB and Camp Blanding would be the same as those described in Alternative A except for the use of pyrotechnics. There would be a similar increased risk of accidental spills from dropped and other equipment at Avon Park AFR. Any accidental release would be handled in accordance with the Avon Park AFR Spill Response Plan and Oil and Hazardous Substances Pollution Contingency Plan. The proposed munitions use at Avon Park AFR would represent a 0.13% increase over baseline (Table 2.1-4, page 2-7). No significant impacts are expected at the proposed locations with the implementation of Alternative B.

4.4.3 Alternative C

Under the No Action Alternative the SFG would not become a CRG. No changes to personnel, equipment, facilities, or training would occur. Therefore, there would be no changes to hazardous material and waste generation, use or storage at Moody AFB, Camp Blanding, or Avon Park AFR.

4.5 EARTH RESOURCES

Analysis of the potential impacts to earth resources involves identifying locations where the action may directly or indirectly affect earth resources and evaluating the degree to which the characteristics, abundance, or value of the resource would be altered, depleted, or degraded.

4.5.1 Alternative A

Implementation of Alternative A would result in minimal ground disturbing activities at Moody AFB. The DZs are located on maintained grass areas on the airfield. It is not expected that earth resources would be greatly impacted by parachute or equipment drops. The renovation of existing facilities to support the storage and maintenance functions of the CRG would result in minimal ground disturbance and effects on the geology since the majority of the renovations are internal and located in previously disturbed areas.

There are potential minimal impacts to earth resources at Camp Blanding during quarterly exercises. Using mechanical means to create craters in the runway would only be conducted at locations that are currently used for this purpose. Therefore, significant impacts to earth resources are not expected. Potential impacts from spills from dropped equipment or equipment driven onto site are covered in Section 4.4. Due to the rather flat topography in the area, runoff is expected to be slow and erosion control measures are already implemented at Camp Blanding.

4.5.2 Alternative B

The potential impacts to earth resources associated with parachute and equipment drops at Moody AFB and Camp Blanding would be the same as those described under Alternative A. The quarterly trainings would occur at Hard Luck DZ at Avon Park AFR where similar training already takes place. Potential impacts to earth resources could occur during rapid runway repair activities. These activities are only proposed in locations where this activity already occurs, therefore, impacts would be considered minimal and not significant. Potential impacts from spills from dropped equipment or equipment driven onto the sites are covered in Section 4.4.

4.5.3 Alternative C

Under Alternative C, the SFG would not become a CRG and there would be no changes to personnel, equipment, facilities, or training. Therefore, there would be no change to earth resources.

4.6 WATER RESOURCES

Analysis of the potential impacts to water resources for this action focuses on whether the proposed action would change the water quality in the proposed training locations.

4.6.1 Alternative A

Implementation of Alternative A is not expected to have any impacts to water resources on Moody AFB and Camp Blanding. Potential impacts on Moody AFB could occur from accidental spills from equipment drops and renovations to facilities. All training activities and renovations would be conducted in accordance with the Spill Prevention Control and Countermeasure Plan to minimize the potential impacts associated with spills. Mission Lake and Grand Bay Swamp exist near the runway and DZs; however, it is expected these water resources are far enough away that no impact is expected. The proposed renovations to buildings at Moody AFB and increases in personnel and equipment are not expected to substantially impact water resources.

CRG training at Camp Blanding would take place at Weinburg DZ. Potential impacts at Camp Blanding could occur from accidental spills from equipment drops, however, the Sand Hill Lake is far enough away that no impact is expected.

4.6.2 Alternative B

Under Alternative B potential impacts to water resources at Moody AFB and Camp Blanding would be the same as those described in Alternative A for construction, parachute jumps, and equipment drops. The quarterly training would be conducted at Avon Park AFR. Lake Arbuckle exists near the proposed training area. Since similar training is already occurring in this area, it is expected that water resources would not be significantly impacted by implementing Alternative B.

4.6.3 Alternative C

Under the No Action Alternative the SFG would not become a CRG. No changes to personnel, equipment, facilities, or training would occur. Therefore, there would be no impact to water resources at Moody AFB, Camp Blanding, or Avon Park AFR.

4.7 AIR QUALITY

Air emissions resulting from the increase in personnel and equipment, changes in training, and renovations have been evaluated for the proposed action. Air quality impacts would be significant if emissions from the proposed action would: 1) increase ambient air pollution concentrations above NAAQS; 2) contribute to an existing violation of NAAQS; 3) interfere with, or delay timely attainment of NAAQS; or 4) impair visibility within federally mandated PSD Class I areas. All of the proposed locations (Moody AFB, Camp Blanding, and Avon Park) are in attainment of the NAAQS; therefore a conformity analysis is not required. None of the areas involved in the proposed action are located in a PSD Class I area.

Emissions resulting from the proposed action have been evaluated in accordance with applicable air quality standards and laws. It is assumed that aircraft will travel higher than 3,000 ft. AGL (mixing height) between the installations. The emissions above the mixing height are not expected to have a substantial impact on the air quality, therefore, the air quality analysis was conducted within the immediate airspace surrounding the installations. The air quality analysis was conducted for the increase in aircraft operations for the parachute proficiency training, monthly equipment drops, quarterly and annual trainings.

Since the CRG would use various aircraft depending on availability during the trainings, a representative aircraft (C-130H) LTO and TGO emission factors were used to estimate emissions for the training. The maximum number of LTOs and TGOs for each training was used to determine the potential impacts to air quality at each location. TGO emissions were used in this analysis to represent passes of aircraft during personnel or equipment drops.

4.7.1 Alternative A

Implementation of Alternative A would have minimal temporary impacts to the air quality at Moody AFB and Camp Blanding. These impacts could occur from increases in aircraft operations. The addition of 33 personnel and their personal vehicles, use of the new equipment, and the proposed renovations to buildings 721 and 758 is not expected to substantially impact the air quality at Moody AFB. Best management practices would be used during all construction activities to reduce the potential impacts to air quality (such as watering disturbed areas in the proposed location of the loading dock). Any air quality impacts associated with construction would be temporary and negligible.

Increasing aircraft operations for parachute proficiency training, equipment drops, and quarterly training would increase aircraft operations at Moody AFB and Camp Blanding (Table 2.1-3, page 2-6). The proposed increase in emissions at both installations for Alternative A would be minimal and would not exceed *de minimus* levels (Table 4.7-1)

Table 4.7-1 Potential Air Quality Impacts Under Alternative A					
<i>Location</i>	<i>CO</i>	<i>VOC</i>	<i>NOx</i>	<i>SOx</i>	<i>PM₁₀</i>
Moody AFB Baseline (tpy)	1,407.20	250.00	154.50	27.10	29.90
Proposed Emissions (tpy)	3.09	2.27	1.82	0.15	0.31
Proposed Total	1,410.29	252.27	156.32	27.25	30.21
% change to baseline	0.22	0.91	1.18	0.57	1.03
Camp Blanding Baseline (tpy)	4.60	1.40	3.90	0.30	0.40
Proposed Emissions (tpy)	0.16	0.09	0.16	0.01	0.02
Proposed Total	4.76	1.49	4.06	0.31	0.42
% change to baseline	3.55	6.39	4.23	4.33	5.97

4.7.2 Alternative B

Implementation of Alternative B would have the same potential impacts at Moody AFB as described in Alternative A. Under Alternative B, Avon Park would be used for quarterly training and the associated equipment drop. Camp Blanding would be used for the remaining equipment drops and possibly one mission of parachute proficiency training. Annual aircraft operations for each training used for air quality analysis are provided in Table 2.1-3, page 2-6. Annual air emissions increases from training at Moody AFB, Camp Blanding, and Avon Park are provided in Table 4.7.2. The proposed increase in emissions resulting from Alternative B would be minimal and not exceed *de minimus* levels.

Table 4.7-2 Potential Air Quality Impacts Under Alternative B					
<i>Location</i>	<i>CO</i>	<i>VOC</i>	<i>NOx</i>	<i>SOx</i>	<i>PM₁₀</i>
Moody AFB Baseline (tpy)	1,407.20	250.00	154.50	27.10	29.90
Proposed Emissions (tpy)	3.09	2.27	1.82	0.15	0.31
Proposed Total	1,410.29	252.27	156.32	27.25	30.21
% change to baseline	0.22	0.91	1.18	0.57	1.03
Camp Blanding Baseline (tpy)	4.60	1.40	3.90	0.30	0.40
Proposed Emissions (tpy)	0.08	0.03	0.11	0.01	0.01
Proposed Total	4.68	1.43	4.01	0.31	0.41
% change to baseline	1.67	2.01	2.79	2.77	3.68
Avon Park AFR Baseline (tpy)	13,344.70	17.64	801.94	8.50	1,810.05
Proposed Emissions (tpy)	0.09	0.06	0.06	0.00	0.01
Proposed Total	13,344.79	17.70	802.00	8.50	1,810.06
% change to baseline	0.00	0.35	0.01	0.00	0.00

4.7.3 Alternative C

Under the No Action alternative, the SFG would not convert to a CRG. The No Action alternative would not change the existing air quality.

4.8 BIOLOGICAL RESOURCES

Impacts to biological resources are considered significant if species or habitats of concern are adversely affected over relatively large areas or disturbances reduce population size or distribution.

4.8.1 Alternative A

Under this alternative, training would occur at existing training sites on Moody AFB and Camp Blanding. The areas for proposed parachute and equipment drops are previously disturbed areas with maintained grasses. Dropping equipment or pallets would disturb existing vegetation at the DZs and field training areas; however, all of these areas are actively used for similar training at Camp Blanding. No wildlife, threatened or endangered species, or their habitats are expected to be impacted from implementing Alternative A. Wetlands within the DZs on Moody AFB may be temporarily negatively impacted by any off-target equipment drops, but no long term damage is expected. No wetlands are within the Weinburg DZ on Camp Blanding. Existing Gopher tortoise burrows and habitat that occurs within the ROI will continue to be avoided as prescribed in the INRMP. No impact to existing threatened and endangered species is expected.

4.8.2 Alternative B

Under Alternative B, all training would occur at existing training sites on Moody AFB, Camp Blanding, and Avon Park AFR. The potential impacts for parachute training and equipment drops at Moody AFB and Camp Blanding would be the same as those described in Alternative A.

The CRG proposes to conduct the quarterly training at the Hard Luck DZ at Avon Park AFR. The Federally endangered Florida grasshopper sparrow occurs adjacent to the Hard Luck boundary. Mitigation measures have been defined in a biological opinion and in the Avon Park AFR INRMP. In addition, measures are defined for minimizing impacts to vegetation and wetlands on the range. The CRG would conduct activities in accordance with existing environmental guidelines at Avon Park AFR, therefore, no significant impacts to biological resources are expected with the implementation of Alternative B.

4.8.3 Alternative C

Under the No Action Alternative, there would be no change in baseline conditions described in Section 3.7. Therefore, there would be no change to biological resources under this alternative.

4.9 CULTURAL RESOURCES

Significant impacts to cultural resources could occur when the action alters the property's characteristics, including relevant features of its environment or use, that qualify it as significant according to the NRHP criteria.

4.9.1 Alternative A

4.9.1.1 Archaeological Resources

The proposed action will have no effect upon known archaeological resources at Moody AFB or Camp Blanding as currently protected through a plan of avoidance. The known site within the ROI at Moody AFB is not expected to be impacted since the CRG does not propose to use or alter this area of the ROI. Throughout the bases, it is possible that currently buried and unknown archaeological resources may be inadvertently uncovered during construction or ground disturbing activities. Archeological resources which are encountered during ground disturbing activities as a result of the proposed action would be handled in accordance with the Moody AFB CRMP and Camp Blanding ICRMP.

4.9.1.2 Architectural Resources

The proposed renovation of Buildings 758 and 721 at Moody AFB will have no effect on architectural resources currently listed in, or considered potentially eligible or eligible for listing in the NRHP. Buildings 758 and 721 are not currently listed. Resources within the cantonment area at Camp Blanding are considered eligible for listing in the NRHP (SEARCH 2003). The cantonment area is only proposed to be used for billeting, therefore no NRHP-eligible architectural resources at Camp Blanding will be affected by the proposed action.

4.9.2 Alternative B

4.9.2.1 Archaeological Resources

The proposed action will have no effect upon known archaeological resources at Moody AFB or Avon Park AFR as currently protected through a plan of avoidance. If any new archeological resources are encountered during ground disturbing activities as a result of the proposed action, they would be handled in accordance with the Moody AFB and Avon Park AFR CRMP. Known archaeological resources considered eligible for listing in the NRHP would be avoided during proposed activities.

4.9.2.2 Architectural Resources

The proposed interior construction of Buildings 758 and 721 at Moody AFB will have no effect on architectural resources currently listed in, or eligible for listing in the NRHP.

At Avon Park several structures within the ROI are eligible for listing in the NRHP. However, all guidelines described in the CRMP would be followed, therefore, no architectural resources at Avon Park will be affected by the proposed action.

4.9.3 Alternative C

Implementing the no action alternative would result in no changes to cultural resources at Moody AFB, Camp Blanding, or Avon Park AFR.

4.10 LAND USE AND TRANSPORTATION

An impact to land use would be considered significant if proposed activities were not compatible with existing land uses. An impact to transportation would be considered significant if the proposed activities would increase traffic beyond existing traffic capacity.

4.10.1 Alternative A

Implementation of Alternative A is not expected to result in major impacts to land use and transportation at Moody AFB. Personnel on base would increase by 33 people. The effects of this increased traffic on and around Moody AFB would be considered negligible. Convoys of personnel and equipment traveling to and from Camp Blanding could occur monthly and would include vehicles to transport 100 to 243 people (243 during the quarterly training). The roads that would be used by these convoys are expected to be able to support the increased traffic. Therefore, no significant impacts to transportation routes between Moody AFB and Camp Blanding would occur. The proposed renovation of buildings 721 and 758 on Moody AFB would have a short-term, minor effect on the local transportation resulting from the transport of workers and construction equipment to and from the project area. No change to existing land uses would occur as a result of the proposed renovations, construction, or training.

4.10.2 Alternative B

Implementation of Alternative B is expected to have the same impacts at Moody AFB as Alternative A. As under Alternative A, no impacts to transportation resources or land use at Camp Blanding are anticipated. Convoys from Moody AFB to Camp Blanding could occur monthly and would include vehicles to transport 100 personnel and equipment. Similarly, the increase in on-and-off installation

transportation resources at Avon Park AFR is not expected to be measurably affected by the proposed training. Only existing roads would be used to transport 243 people during the quarterly and annual trainings. While on Avon Park AFR, only existing roads would be used. No change in land use at Avon Park would occur.

4.10.3 Alternative C

Under the No Action Alternative, the SFG would not become a CRG. No changes to personnel, equipment, facilities, or training would occur. Implementation of this alternative would result in no changes to existing land use or transportation resources.

4.11 VISUAL AND RECREATIONAL RESOURCES

An impact to visual and recreational resources would be considered significant if the viewshed was substantially altered or if recreation was substantially reduced or changed.

4.11.1 Alternative A

Implementation of Alternative A is not expected to result in major impacts to visual and recreational resources at Moody AFB. The proposed renovation of buildings and the addition of a loading dock is not expected to have a substantial influence on the visual resources of the area. The increase in airfield and airspace usage associated with training is not expected to result in any impact to visual resources (see Section 4.1 for Airspace Impacts). Similarly, the proposed training at Camp Blanding is not expected to appreciably affect visual resources as the site is an active training area.

As a result of the increase in trainings, availability of recreational facilities for the public may decrease at Camp Blanding. This impact is expected to be minimal, however, since the proposed training would occur a maximum of 12 times per year at this location.

4.11.2 Alternative B

Implementation of Alternative B is expected to have the same impacts at Moody AFB as Alternative A. Under this alternative, training would be conducted up to eight times per year at Camp Blanding. Like Alternative A, the proposed training at Camp Blanding is not expected to appreciably affect visual or recreational resources. Similarly, the proposed annual and quarterly training would take place four times per year totaling a maximum of 22 days per year at Avon Park AFR. The proposed training at Avon Park is not expected to appreciably affect visual or recreational resources.

4.11.3 Alternative C

Under the No Action alternative, the SFG would not become a CRG. No changes to personnel, equipment, facilities, or training would occur. Implementation of this alternative would not change visual or recreational resources.

4.12 SOCIOECONOMICS

An impact to socioeconomics would involve a substantial change in the population, employment, or income for the ROI.

4.12.1 Alternative A

Implementing the Alternative A is not expected to substantially impact social or economic resources, including population, income, and employment within the Moody AFB ROI and the Camp Blanding ROI (Lanier, Lowndes, and Clay counties). Conversion of the SFG to a CRG would include an increase of approximately 33 positions, which accounts for an approximate 0.65% percent increase in employment at Moody AFB (Table 2.1-4, page 2-7) and a 0.07 percent increase in total employment within Lanier and Lowndes counties (BEA 2002). This personnel increase would result in an approximate 0.04 percent increase in the population within the Moody AFB ROI and no significant impacts are expected.

4.12.2 Alternative B

Impacts under this alternative are the same as under Alternative A.

4.12.3 Alternative C

Selecting the No Action Alternative would result in no impacts to social or economic resources, including population, income and employment in any of the ROIs.

4.13 ENVIRONMENTAL JUSTICE

An impact from the proposed action would be considered significant if it disproportionately affected a poverty or minority area. Implementing a proposed action or alternative could affect minority and low-income populations if these populations felt adverse impacts disproportionately to the rest of the population.

4.13.1 Alternative A

Implementing this alternative is not expected to substantially impact minority or low-income populations within the Moody AFB ROI. Lanier and Lowndes counties are not considered areas of concentrated minority population, nor poverty areas. Since there would be no anticipated impacts to population or income and employment from implementing Alternative A, there would not be anticipated disproportionate impacts to minority or low-income populations.

4.13.2 Alternative B

Implementing Alternative B would result in the same impacts as described under Alternative A.

4.13.3 Alternative C

There would be no anticipated impacts to population or income and employment from selecting the No Action Alternative, there would not be anticipated disproportionate impacts to minority or low-income populations.

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5.0 CUMULATIVE EFFECTS AND IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

5.1 CUMULATIVE EFFECTS

CEQ regulations stipulate that the cumulative effects analysis within an EA should consider the potential environmental impacts resulting from “the incremental impacts of the action when added to other past, present, and reasonably foreseeable actions regardless of what agency or person undertakes such other actions” (40 CFR 1508.7). CEQ guidance in *Considering Cumulative Effects* affirms this requirement, stating that the first steps in assessing cumulative effects involve defining the scope of the other actions and their interrelationship with the proposed action (CEQ 1997). The scope must consider geographic and temporal overlaps among the proposed action and other actions. It must also evaluate the nature of interactions among these actions.

Cumulative effects most likely arise when a relationship of synergism exists between a proposed action and other actions expected to occur in a similar location or during a similar time period. Actions overlapping with or in proximity to the proposed action would be expected to have more potential for a relationship than those more geographically separated. Similarly, actions that coincide, even partially, in time would tend to offer a higher potential for cumulative effects.

The scope of the cumulative effects analysis involves both the geographic extent of the effects and the time frame in which the effects could be expected to occur. For this EA the ROI includes Moody AFB, Camp Blanding, and Avon Park AFR. Beyond determining that the geographic scope and time frame for this action interrelate to the proposed action, the analysis employs the measure of “reasonably foreseeable” to include or exclude other actions. For the purposes of this analysis, public documents prepared by Federal, state and local government agencies form the primary sources of information regarding reasonably foreseeable actions. Documents used to identify other actions included notices of intent for environmental impact statements (EIS) and EAs, management plans, land use plans, other NEPA studies, and economic and demographic projections.

5.2 PAST, PRESENT, AND REASONABLY FORESEEABLE ACTIONS

The activities described here serve to highlight major influences in the region and to provide perspective on the contribution to any impacts generated by the proposed action.

5.2.1 Moody AFB

Past Actions

In 2002, an EA was published to procure the use of an existing airfield for primary use as an auxiliary airfield by the 3rd Flying Training Squadron at Moody AFB and conduct 176,000 airfield operations annually at the airfield. The T-6A aircraft make up the majority of the annual sorties conducted at Moody AFB. Establishing the auxiliary airfield would not change the annual number of sorties at Moody AFB.

Present Actions

No other actions are currently occurring on Moody AFB that are considered relevant for cumulative analysis.

Reasonable Foreseeable Actions

Moody AFB is in the preliminary stages of preparing an EA to construct a security fence around the perimeter of the airfield. Further details about the proposed action are not currently known.

5.2.2 Camp Blanding

Past Actions

No past actions on Camp Blanding have been analyzed in the recent past that are considered to have a cumulative impact.

Present Actions

A Draft EA was released February 2003 to Construct a New Combined Support Maintenance Shop at Camp Blanding. The proposed action would replace the existing facility which provides maintenance and repair services for military vehicles and equipment. The proposed action would construct the new facility in the cantonment area of Camp Blanding.

Reasonable Foreseeable Actions

Based on the potential impacts associated with this action, no other reasonably foreseeable actions are considered relevant for cumulative analysis.

5.2.3 Avon Park AFR

Past Actions

Based on the potential impacts associated with this action, no other recent past actions are considered relevant for cumulative analysis.

Present Actions

A Draft EA for Vertical Increases of Restricted Area Airspace at Avon Park AFR is being developed. This action will increase the available restricted airspace for F-16 training at higher altitudes. These aircraft currently train at Avon Park AFR.

Reasonably Foreseeable Actions

A Notice of Intent to prepare an EIS for Navy Air-to-Ground Training at Avon Park AFR was released in the Federal Register on February 25, 2003. The Navy proposes to use three different ranges at Avon Park AFR as locations for high explosive air-to-ground ordnance training for East Coast Carrier-based fighter aviations squadrons.

5.3 CUMULATIVE EFFECTS ANALYSIS

The incremental contribution of impacts of the proposed action, when considered in combination with other past, present, and reasonably foreseeable actions, could result in impacts to scheduling. The EIS being prepared for Navy Air-to-Ground training at Avon Park AFR could increase use of the range. Since the ranges used for Air-to-Ground training would not be the same as those used for on-ground field activities, the primary concern would be billeting for the units. The SFG proposes to train on Avon Park AFR for up to four weeks a year. It is not expected that there would be any cumulative impacts from these two actions. The possible construction of a security fence around the Moody AFB airfield could potentially impact CRG training. The design and timing for construction is not known, however, the CRG could conduct the affected training at Camp Blanding during peak construction times. In summary, the projected impacts of the proposed action are not individually significant. The incremental contribution of impacts of the proposed action, when considered in context with other past, present, and reasonable foreseeable actions, would not be significant.

5.4 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

NEPA requires that environmental analyses include identification of "...any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." Irreversible and irretrievable resource commitments are related to the use of non-renewable resources and the effects that the uses of these resources have on future generations. Irreversible effects primarily result from the use or destruction of a specific resource (e.g., energy and minerals) that cannot be replaced within a reasonable time frame. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action.

For the proposed action, most resource commitments are neither irreversible nor irretrievable. Most impacts are short-term and temporary, or long-lasting but negligible. The proposed renovation at Moody AFB would require the consumption of fuels as well as building materials such as concrete, sand, bricks, steel, insulation, wiring, and paint. The proposed action would require the use of energy, both electric and fossil fuels, for ongoing operations and increased aircraft traffic. This would continue as long as the parachute maintenance program and the training requirements remain in operation.

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7.0 PERSONS AND AGENCIES CONTACTED

HQ ACC, Langley AFB

Ms Linda DeVine, HQ ACC/CEVP
Mr Steve Kunich, HQ ACC/SFXS
Maj Charles Perham, HQ ACC/CEX

Moody AFB

Mr William Bryan, 347 CES/CEC
Ms Patti Clark, 347 CES/CEVC
1LT Mack Coker, 347 OSS/OSA
Maj Kevin Cullen, 820 SFG/A-3 SFO
Ms Becky Evans, 347 CES/CEVA
Mr Robert Jefferson, 347 CES/CEEP
Ms Jennifer Kilbourn, 347 CES/CEVC
Mr Greg Lee, 347 CES/CEVA
CMSgt Randell McCormick, 820 SFG/CEM
Maj Thomas McCurley, 479 TRSS/OSOS
SMSgt Jess Naylor, 820 SFG/A-3 SFO
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Msgt David Reagan, 347 RQW/PA
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Camp Blanding
Mr Markus Craig, GIS Program Coordinator
Maj Gary Magowan, 202 RED HORSE
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Ms Amy Wiley, Environmental Protection
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State Agencies

Mr Lonice C. Barrett, State Historic
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Dr Janet Matthews, State Historic Preservation
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APPENDIX A RELEVANT LAWS & REGULATIONS

Clean Air Act (CAA)

Clean Water Act (CWA)

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

Endangered Species Act of 1973 (ESA)

Executive Order (EO) 11514, Protection and Enhancement of Environmental Quality

Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations
and Low-Income Populations

National Historic Preservation Act of 1966 (NHPA)

National Environmental Policy Act of 1969 (NEPA)

Resource Conservation and Recovery Act (RCRA)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Toxic Substances Control Act of 1976 (TSCA)

32 Code of Federal Regulations (CFR) Part 989, The Environmental Impact Analysis Process

40 Code of Federal Regulations (CFR), Protection Of Environment

Part 260 - Hazardous Waste Management System: General

Part 261 - Identification and Listing of Hazardous Waste

Part 262 - Standards Applicable to Generators of Hazardous Waste

Part 263 - Standards Applicable to Transporters of Hazardous Waste

Part 264 - Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and
Disposal Facilities

Part 265 - Interim Status Standards for Owners and Operators of Hazardous Waste Treatment,
Storage, and Disposal Facilities

Part 266 - Standards for the Management of Specific Hazardous Wastes and Specific Types of
Hazardous Waste Management Facilities

Part 268 - Land Disposal Restrictions

Part 270 - EPA Administered Permit Programs: The Hazardous Waste Permit Program

40 Code of Federal Regulations (CFR) 1508.7, Protection of Environment, Council on Environmental
Quality, Cumulative Impact

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APPENDIX B FEDERAL AND STATE AGENCY COMMENTS



Jeb Bush
Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

June 18, 2003

Ms. Michele Cook
HQ ACC/CEVP
129 Andrews Street, Suite 102
Langley AFB, Virginia 23665-2769

RE: Department of the Air Force - Draft Environmental Assessment/FONSI - Conversion of the 820th Security Forces Group to a Contingency Response Group - Moody Air Force Base, Georgia - of Interest to the State of Florida.
SAI # FL200306092486C

Dear Ms. Cook:

The Florida State Clearinghouse is in receipt of the referenced Draft Environmental Assessment (EA) regarding the proposed Security Forces Group conversion at Moody Air Force Base in Georgia and associated additional training activities at Camp Blanding and/or Avon Park Air Force Range in Florida.

Gubernatorial Executive Order 95-359, Section 4, provides that all federal funding applications which originate from non-state agencies, such as local governments and non-profit organizations, and which will have no significant effect on Florida's environment, are exempted from the intergovernmental coordination and review process overseen by the State Clearinghouse.

The Department concurs with the U.S. Air Force's conclusion that a Finding of No Significant Impact is appropriate for the federal action proposed within the state of Florida. We have determined that there will be no effect on coastal zone resources as a result of this action, pursuant to 15 CFR 930.35.

If you have any questions regarding this letter or the state intergovernmental review process, please contact Ms. Lauren P. Milligan at (850) 245-2161. Thank you.

Sincerely,

Sally B. Mann, Director
Office of Intergovernmental Programs

SBM/lm

"More Protection, Less Process"

Printed on recycled paper.



FLORIDA DEPARTMENT OF STATE
Glenda E. Hood
Secretary of State
DIVISION OF HISTORICAL RESOURCES

Mr. Alton Chavis
Department of the Air Force
HQ ACC/CEVP
129 Andrews Street, Suite 102
Langley Air Force Base, Virginia 23665-2769

June 11, 2003

RE: DHR Project File No. 2003-4962
Received by DHR June 9, 2003 *SAK 6/11/03*
Draft Environmental Assessment (EA) for Conversion of the 820th Security Forces Group (SFG)
to the 820th Contingency Response Group (CRG) at Moody AFB Georgia, Camp Blanding and
Avon Park Air Force Range, Florida

Dear Mr. Chavis:

Our office received and reviewed the above referenced project in accordance with Section 106 of the *National Historic Preservation Act of 1966*, as amended and *36 CFR Part 800: Protection of Historic Properties* and the *National Environmental Policy Act of 1969*, as amended. The State Historic Preservation Officer is to advise Federal agencies as they identify historic properties (listed or eligible for listing, in the *National Register of Historic Places*), assess effects upon them, and consider alternatives to avoid or minimize adverse effects.

Based on a review of sections 3.9 and 4.9, both dealing with Cultural Resources, this office concurs with your finding that no historic properties will be affected by this undertaking.

If you have any questions concerning our comments, please contact Scott Edwards, Historic Preservation Planner, by electronic mail sedwards@dos.state.fl.us, or at 850-245-6333 or 800-847-7278.

Sincerely,

Janet Snyder Matthews
Janet Snyder Matthews, Ph.D., Director, and
State Historic Preservation Officer

500 S. Bronough Street • Tallahassee, FL 32399-0250 • <http://www.flheritage.com>

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☒ Historic Preservation
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☐ Historical Museums
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☐ Palm Beach Regional Office
(561) 279-1475 • FAX: 279-1476

☐ St. Augustine Regional Office
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☐ Tampa Regional Office
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United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE

247 South Milledge Avenue
Athens, Georgia 30605

West Georgia Sub Office
P.O. Box 52560
Ft. Benning, Georgia 31995-2560

Coastal Sub Office
4270 Norwich Street
Brunswick, Georgia 31520

July 3, 2003

Attn: Ms. Michele Cook
HQ ACC/CEVP
129 Andrews Street, Suite 102
Langley AFB VA 23665-2769

RE: FWS Log# 03-0459

Dear Ms. Cook:

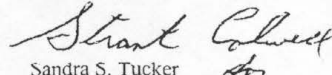
The U.S. Fish and Wildlife Service (Service) has reviewed the Draft Environmental Assessment (EA) for conversion of 820 Security Forces Group (SFG) to 820 Contingency Response Group (CRG) at Moody Air Force Base, Georgia. We submit the following comments in accordance with the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*).

The Draft EA analyzes potential impacts from the proposed conversion from 820 SFG to 820 CRG, which will allow Moody Air Force Base to maintain greater flexibility in supporting Expeditionary Aerospace Force taskings and deployments. This proposed conversion would produce a slight increase in personnel and equipment storage, and allow the CRG to train monthly at Moody Air Force Base Easy and Airshow Drop Zones.

A list of federally protected species occurring on Moody Air Force Base was included in table 3.8-1 of the Draft EA. The Red-cockaded woodpecker is also known to occur in Lowndes County, but there are no known nests on Moody Air Force Base. Additionally, no federally protected species inhabit the Easy or Airshow Drop Zones in which monthly parachute proficiency and equipment drops will take place. At this time, we have no concerns or comments regarding federally protected species for the proposed project, as the conversion from SFG to CRG will not result take and/or habitat destruction or modification of any listed species. However, we recommend coordination with the U.S. Army Corps of Engineers because of potential impacts to wetlands within the drops zones.

Thank you for your continued dedication to federally listed species on Moody Air Force Base. If you have any questions, please do not hesitate to contact Stacey Carlson of my staff at 912-265-9336, ext. 22.

Sincerely,


Sandra S. Tucker
Field Supervisor

07/22/03 09:55 FAX 7577641975

HQ ACC CEVP

002

Georgia Department of Natural Resources

Historic Preservation Division

Lonice C. Barrett, Commissioner

W. Ray Luce, Division Director and Deputy State Historic Preservation Officer
156 Trinity Avenue, S.W., Suite 101, Atlanta, Georgia 30303-3600
Telephone (404) 656-2840 Fax (404) 657-1040 <http://www.gashpo.org>

MEMORANDUM

TO: Alton Chavis
Chief, Environmental Analysis Branch
Department of the Army
HQ ACC/CEVP
129 Andrews Street, Suite 102
Langley AFB, Virginia 23665-2769

FROM: Serena G. Bellew *SGB*
Environmental Review Coordinator
Historic Preservation Division

RE: Finding of "No Historic Properties Affected"

PROJECT: **Moody Air Force Base: Convert 820 SFG to 820 CRG, Rehabilitate Buildings
721&758
Federal Agency: Air Force
HP 030609-003**

COUNTY: Lowndes County, Georgia

DATE: July 9, 2003

The Historic Preservation Division has reviewed the information received concerning the above-referenced project. Our comments are offered to assist federal agencies and project applicants in complying with the provisions of Section 106 of the National Historic Preservation Act.

Based on the information submitted, HPD has determined that no historic properties or archaeological resources that are listed in or eligible for listing in the National Register of Historic Places will be affected by this undertaking. Please note that historic and/or archaeological resources may be located within the project's area of potential effect (APE), however, at this time it has been determined that they will not be impacted by the above-referenced project. Furthermore, any changes to this project as proposed will require further review by our office for compliance with the Section 106 process.

If we may be of further assistance contact me at (404) 651-6624. Please refer to the project number assigned above in any future correspondence regarding this project.

SGB:mcv

cc: Michelle Cook, Langley Air Force Base, Virginia

07/22/03 09:56 FAX 7577641975

HQ ACC CEVP

003



United States Department of the Interior

FISH AND WILDLIFE SERVICE
South Florida Ecological Services Office
1339 20th Street
Vero Beach, Florida 32960



July 7, 2003

Alton Chavis
Chief, Environmental Analysis Branch
HQ ACC/CEVP
129 Andrews Street, Suite 102
Langley Air Force Base, Virginia 23665

Dear Mr. Chavis:

We have reviewed the June 2003 Draft Environmental Assessment for "Conversion of the 820th Security Forces Group at Moody AFB, Georgia to a Contingency Response Group" in accordance with section 7 of the Endangered Species Act of 1973, as amended (87 Stat. 884; 16 U.S.C. 1531 *et seq.*) and the Sikes Act Improvement Act of 1997.

Alternative B describes quarterly and annual training that would take place at Hard Luck Drop Zone at Avon Park Air Force Range in Florida for up to 4 weeks per year. Although the drop zone is located adjacent to habitat occupied by the endangered Florida grasshopper sparrow (*Ammodramus savannarum floridanus*), the proposed action will take place on maintained grasses and existing runways, all travel will be on existing roads, and no live ammunition will be used. Therefore, we believe that the action, as proposed, is not likely to adversely affect threatened and endangered species.

Thank you for the opportunity to review and comment on this proposed action. If you have any questions, please contact Melody Ray-Culp at 772-562-3909, extension 263, or Cindy Schulz at extension 305.

Sincerely yours,

Linda S. Ferrell
Assistant Field Supervisor
South Florida Ecological Services Office



United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE

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July 25, 2003

JUL 28 2003 CEV 7/30/03
Mr. Lowell D. Klepper
Department of the Air Force
347 Civil Engineer Squadron (ACC)
3485 Georgia Street
Moody Air Force Base, Georgia 31699-1707
Attn: Mr. Gregory W. Lee

Re: FWS Log # 03-0550

Dear Sir:

Thank you for your June 24, 2003 memorandum concerning the proposed conversion of the 820th Security Forces Group (SFG) at Moody Air Force Base (AFB), Georgia, to a Contingency Response Group (CRG). The proposed action would result in minor renovations to facilities at Moody AFB, and a small increase in personnel, equipment, and airfield operations. Also, the 820th CRG could conduct monthly equipment and personnel drops on the existing drop zones on Moody AFB airfield. We have reviewed the information you provided and submit the following comments under provisions of the Endangered Species Act of 1973 (Act) as amended (16 U.S.C. 1531 et seq.).

According to the information you provided, the proposed project sites were surveyed by installation personnel in 2002 and no federally listed species were identified within the proposed project areas. Therefore, we agree with your determination that this proposed project is not likely to adversely affect Federally endangered or threatened species. We believe that the requirements of section 7 of the Endangered Species Act have been satisfied and no further consultation is required.

We appreciate the opportunity to comment during the planning stages of your project. If you have any questions, please write or call staff biologist Robert Brooks of our Brunswick office at (912) 265-9336.

Sincerely,

Strant J. Colwell

Sandra S. Tucker
Field Supervisor *for*



DEPARTMENT OF THE AIR FORCE

347th CIVIL ENGINEER SQUADRON (ACC)
MOODY AIR FORCE BASE, GEORGIA

MEMORANDUM FOR Mr. Robert Brooks
Acting Assistant Field Supervisor
U.S. Fish and Wildlife Service
4270 Norwich Street
Brunswick GA 31520

FROM: 347 CES/CD

SUBJECT: Conversion of the 820th Security Forces Group (SFG) at Moody Air Force Base (AFB), Georgia, to a Contingency Response Group (CRG)

1. The United States Air Force, Headquarters Air Combat Command, has prepared a draft environmental assessment (EA) for the subject action (Attachment 1). The proposed action would result in minor renovations to facilities at Moody AFB, and a minimal increase in personnel, equipment, and airfield operations. Additionally, the 820 CRG could conduct monthly equipment drops and personnel drops on existing drop zones in the Moody AFB airfield. A map showing the location of Moody AFB is attached (Attachment 2).
2. It should be noted that the target areas for the equipment/personnel drop zones are confined to the Moody AFB airfield and do not cross the paved perimeter roads or the flightline cantonment area. The boundaries of the drop zones include a buffer/safety area to limit ground personnel activities during equipment and personnel drops. A map showing the location of the existing drop zones and the target area is attached (Attachment 3).
3. Moody AFB completed baseline surveys for threatened and endangered species on the installation in 1995, and conducted additional surveys for eastern indigo snakes in 2002. No federally listed species, including eastern indigo snakes, have ever been recorded as being present on or near the airfield. Eastern indigo snakes were sporadically sighted on the installation from 1991 through 1996, although the survey in 2002 failed to locate any indigo snakes. A map showing the location of recent sightings on Moody AFB is attached (Attachment 4).
4. There is a large gopher tortoise population (Colony 71st) located immediately east of the airfield (see map at Attachment 3), consisting of 119 burrows, with an estimated tortoise population size of 55. The closest gopher tortoise burrow is located 75 feet from the edge of the equipment drop zone on the other side of Perimeter Road. Because the federally listed eastern indigo snake is considered a commensal of gopher tortoises, Moody AFB routinely consults on activities occurring in gopher tortoise habitat.

5. It is the opinion of our staff that the proposed conversion of the 820 SFG to the 820 CRG will not jeopardize the continued existence of any listed species potentially occurring in the area. Therefore, we request your review and concurrence with the proposed military action.

6. If you need any further information or if you have any questions, please contact Mr. Gregory Lee, (229) 257-5881, e-mail: gregory.lee@moody.af.mil.

LOWELL D. KLEPPER, P.E.
Deputy Base Civil Engineer

Attachments:

1. Draft EA
2. Map -- Location of Moody AFB
3. Map -- Location of Drop Zones
4. Map -- Location of Indigo Snake Sightings